



# Environmental Notification Form

Submitted Pursuant to the Massachusetts Environmental Policy Act

## CAPE COD GATEWAY AIRPORT



Submitted to:

**Executive Office of Energy and Environmental  
Affairs**

MEPA Office

100 Cambridge Street, Suite 900

Boston, MA 02114

Submitted by:

**Cape Cod Gateway Airport**

480 Barnstable Rd.

Hyannis, MA 02601

Prepared by:

**Epsilon Associates, Inc.**

3 Mill & Main Place, Suite 250

Maynard, MA 01754

In Association with:

**Airport Solutions Group**

**Howard Stein Hudson**

**GEI Consultants Inc**

**Commonwealth Heritage Group**





November 30, 2022

Secretary Bethany A. Card  
Executive Office of Energy and Environmental Affairs  
100 Cambridge Street, Suite 900  
Boston MA 02114

**Subject: Environmental Notification Form, Cape Cod Gateway Airport, Hyannis, MA**

Dear Secretary Card:

On behalf of the Cape Cod Gateway Airport, I am pleased to submit the enclosed Environmental Notification Form (ENF) for proposed improvements in the recent Master Plan update to the Cape Cod Gateway Airport in Hyannis, MA.

The Project meets the ENF review threshold for the expansion of an existing runway at an airport (11.03(6)(b)iii), the construction of a new taxiway at an airport (11.03(6)(b)iv) and 11.03(1)a(2) creation of ten or more acres of impervious area. Because the Project is located within a mile of an Environmental Justice (EJ) Population, it therefore requires an EIR pursuant to 301 CMR 11.06(7).

The Master Plan recommends improvements needed to meet the goals of the Airport and its users. These important safety and infrastructure projects will serve to bring the Airport's geometry into compliance with Federal Aviation Administration ("FAA") standards (FAA AC 150/5300-13A, Airport Design) and meet current forecasted demand for airport use and hangar space. The ENF is being filed to commence MEPA review for the Project.

Projects to be implemented over the next 20-year period include: Runway 15-33 extension, runway safety area enhancements, taxiway modifications including constructing a partial parallel taxiway to Runway 15-33, removing Taxiway D between Taxiway A and the new parallel taxiway, constructing a run-up area along the north side of the proposed partial parallel taxiway, removing Taxiway E, terminal Improvements, general aviation (GA) improvements, and non-aeronautical land use development areas.

The Proponent anticipates that the ENF will be noticed in the Environmental Monitor on December 7<sup>th</sup>, 2022. We understand the comment period ends on December 27<sup>th</sup> with a certificate to be issued on January 6<sup>th</sup>, 2023.

Secretary Bethany A. Card  
Executive Office of Energy and Environmental Affairs  
November 30, 2022

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We look forward to working with the MEPA Office on this project that will contribute to the Town of Barnstable's commercial needs and the continued positive growth of the Commonwealth.

If you have any questions about the project, please call me at (978) 461-6215.

Sincerely,  
EPSILON ASSOCIATES, INC.

A handwritten signature in black ink that reads "Alyssa Jacobs". The signature is written in a cursive, flowing style.

Alyssa Jacobs  
Principal & Manager, Ecological Sciences

cc: Katie Servis, Airport Manager, Cape Cod Gateway Airport

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## **Environmental Notification Form**

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**Commonwealth of Massachusetts**  
Executive Office of Energy and Environmental Affairs  
Massachusetts Environmental Policy Act (MEPA) Office

## Environmental Notification Form

*For Office Use Only*

EEA#:

MEPA Analyst:

*The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.*

Project Name: [Cape Cod Gateway Airport \(formerly Barnstable Municipal Airport\) Master Plan Projects](#)

Street Address: [480 Barnstable Rd. Hyannis, MA 02601](#)

Municipality: [Hyannis](#)

Watershed: [Cape Cod](#)

Universal Transverse Mercator  
Coordinates:  
[392925, 4613609](#)

Latitude: [41.667045](#)  
Longitude: [-70.286206](#)

Estimated commencement date: [2025](#)

Estimated completion date: [2036](#)

Project Type: [Airport](#)

Status of project design: [2% complete](#)

Proponent: [Cape Cod Gateway Airport](#)

Street Address: [480 Barnstable Rd. Hyannis, MA 02601](#)

Municipality: [Hyannis](#)

State: [MA](#) | Zip Code: [02601](#)

Name of Contact Person: [Alyssa Jacobs](#)

Firm/Agency: [Epsilon Associates](#)

Street Address: [3 Mill & Main Place, Suite 250](#)

Municipality: [Maynard](#)

State: [MA](#) | Zip Code: [01754](#)

Phone: [978-897-7100](#)

Fax: [\(978\) 897-0099](#)

E-mail: [ajacobs@epsilonassociates.com](mailto:ajacobs@epsilonassociates.com)

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

☒ Yes ☐ No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8)) ☐ Yes ☒ No

a Rollover EIR? (see 301 CMR 11.06(13)) ☐ Yes ☒ No

a Special Review Procedure? (see 301CMR 11.09) ☐ Yes ☒ No

a Waiver of mandatory EIR? (see 301 CMR 11.11) ☐ Yes ☒ No

a Phase I Waiver? (see 301 CMR 11.11) ☐ Yes ☒ No

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

- 11.03(1)a(2) Creation of ten or more acres of impervious area.
- 11.03(6)b(iii) Expansion of an existing runway at an airport
- 11.03(6)b(iv) Construction of a New taxiway at an airport

Which State Agency Permits will the project require?

- Massachusetts Department of Environmental Protection (MassDEP) 401 Water Quality Certificate (WQC)
- Massachusetts General Permit 10 for Linear Transportation Projects, Section 404

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

Funding anticipated from MassDOT Aeronautics Division is \$7.5M over a 20-year period.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
<b>LAND</b>			
Total site acreage	639		
New acres of land altered		63	
Acres of impervious area	167	21 <sup>5</sup>	188
Square feet of new bordering vegetated wetlands alteration		0.08 <sup>1</sup> (3,427 sf)	
Square feet of new other wetland alteration		+/-23,000 <sup>1</sup>	
Acres of new non-water dependent use of tidelands or waterways		0	
<b>STRUCTURES</b>			
Gross square footage	43,097 <sup>2</sup>	TBD	55,000 <sup>2</sup>
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A

TRANSPORTATION			
Vehicle trips per day	88 <sup>3</sup>		176 <sup>3</sup>
Parking spaces	1,135	0	1,135
WASTEWATER			
Water Use (Gallons per day)	7,000 <sup>4</sup>	Tbd	Tbd
Water withdrawal (GPD)	7,000	Tbd	Tbd
Wastewater generation/treatment (GPD)	13,000	Tbd	Tbd
Length of water mains (miles)	--	--	--
Length of sewer mains (miles)	--	--	--
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA #) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input checked="" type="checkbox"/> Yes (EEA #14642, 12267, 10078, 9206, 8017, 5077, 4247, 3544, 2522, 2315, 664) <input type="checkbox"/> No			

- <sup>1</sup> Wetland impact quantifies are based upon preliminary field data. Wetland impacts will be detailed in the Draft EIR based on analysis of field data, and advanced project designs for the Preferred Alternative and other Alternatives.
- <sup>2</sup> Attributable to the airport's terminal building only. Additional airport related structures include an ARFF building, lighting vault, t-hangars, and conventional hangars (Air Cape Cod facility, both Cape Air hangars), etc. Section 5.3 of the Airport's Master Plan identifies the need for up to 55,000 SF to meet demand at 200 peak (design) hour passengers. There is an existing shortage of conventional hangar space, the Master Plan recommends planning for six individual hangars and up to eight new conventional hangars to account for unplanned growth and new businesses. Terminal Building and/or hangar space needs/impacts will be developed during the Draft and Final EIR stages, as appropriate.
- <sup>3</sup> Vehicle trips provided here are Peak Hour Vehicle Assumptions for Exit Traffic (Vehicles Only, includes Parking and Rental Cars) to be consistent with the Airport's Master Plan estimates in Chapter 5 - Facility Requirements. A total of 176 peak hour exit trips would be a maximum assumption under the 200 Peak Hour Passenger scenario used in the AMPU planning calculations. The existing daily vehicle trips have not been counted. While it is common practice to use the Institute of Transportation Engineers' (ITE's) Land Use Codes (LUCs) to estimate trips in the absence of traffic counts, ITE does not have an applicable LUC for the Cape Cod Airport. Transportation impacts from vehicle trips will be developed during the Draft and Final EIR stages, as appropriate.
- <sup>4</sup> Wastewater usage estimated based on prior MEPA filing (#14642, from 2010). Information relative to wastewater impacts will be developed during the Draft and Final EIR stages, as appropriate.
- <sup>5</sup> 40 acres of is associated with North and East Ramp projects. Approximately 35 acres for both the East Ramp and North Ramp expansion was previously reviewed and approved under MEPA in project EAA #14642 (in 2010). The DEIR will provide comparisons of previously approved areas and newly proposed ramp areas not previously reviewed.



**GENERAL PROJECT INFORMATION – all proponents must fill out this section**

**PROJECT DESCRIPTION:**

Describe the existing conditions and land uses on the project site:

The Cape Cod Gateway Airport (the “Airport” or “Project site”), is located in Hyannis, Massachusetts on Cape Cod (see Attachment A Figure 1, USGS Locus Map and Figure 2, Aerial Locus Map). The Airport is bordered by a Massachusetts Fish and Wildlife designated conservation area and Route 6 to the north, Barnstable Road (Route 132) to the south, Yarmouth Road to the west, and an industrial park (Independence Park) to the east. The Airport is owned by the Town of Barnstable and provides commercial and general aviation services to Boston, New York and the islands of Martha’s Vineyard and Nantucket. It is managed by the Cape Cod Gateway Airport Commission and airport staff and is home to Cape Air and Nantucket Airlines along with other charter, corporate, and general aviation aircraft operators. JetBlue operates daily seasonal service to JFK-New York (May – October) and Southern Airways Express offers daily seasonal service to Nantucket (May – October).

The Airport encompasses 639 acres of land, of which approximately 140 acres make up developed areas for airport facilities and operations including a 43,097 square foot (sf) Passenger Terminal Building, Air Traffic Control Tower (ATCT), extensive parking facilities, aircraft ramps, hangars, runways, taxiways, an Airport Rescue and Fire Fighting (ARFF) building and an aircraft fuel farm. More than 45 private tenants lease space on parts of the Airport property. The existing airfield configuration at the Airport consists of two runways. Runway 15-33 is 5,255 feet long by 150 feet wide and is aligned in a northwest to southeast direction. Runway 6-24 is 5,425 feet long by 150 feet wide and is aligned in a southwest to northeast direction.

Approximately 460 acres of the Airport are undeveloped areas consisting of upland evergreen and deciduous forests, wetlands, and two ponds (Upper Gate Pond and Lewis Pond) to the north. The forested communities are located north of the intersection between the two runways, with smaller patches of forested lands northwest of the Runway 15 end and southeast of Runway 6-24. Several of the small, isolated freshwater wetlands located on or immediately adjacent to Airport property are identified as Potential Vernal Pools (PVPs).

The Airport is zoned for Business and Industrial uses. The following land uses fall within the Airport: tax exempt, commercial, and open land. The land uses surrounding the Airport property include agriculture, commercial, industrial, mixed use-other, open land, residential multi-family, residential single-family, tax exempt, unknown, and water.

All of Cape Cod is considered a sole source aquifer for the drinking water for the area. The Project site is located within the Cape Cod’s public drinking water supply’s wellhead protection areas (Zone IIs as defined by MassDEP). The Airport is also located within the Massachusetts Coastal Zone. However, no coastal resources within the Coastal Barriers Resources Act (CBRA) are located in the Project site.

The Project site is not at a high risk for flooding. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the Airport is within Zone X, an area of minimal flood hazard determined to be outside the 500-year flood (panels

25001C0566J, effective on 07/16/2014, and 25001C0567J, effective on 07/16/2014). Only a small section of forested area near Mary Dunn Pond, within the Airport property, is within an area with a 0.2 percent annual chance of flood hazard.

The Project site is not located within an Area of Critical Environmental Concern (ACEC) but supports habitat for many bird species, both resident and migratory. The Information, Planning, and Consultation (IPaC) report identifies several birds that are protected under the Migratory Birds Treaty Act of 1918 and/or the Bald Eagle and Golden Eagle Protection Act of 1940. Migratory bird species identified by the USFWS at the Airport that are of particular concern either because they are on the USFWS Birds of Conservation Concern (USFWS 2008) or otherwise warrant special attention in the region (New England/Mid-Atlantic Coast) and at this location.

The Airport contains areas mapped as Estimated Habitat of Rare Wildlife (EH) and Certified Vernal Pools and/or Priority Habitat of Rare Species (PH) as designated by the Massachusetts Natural Heritage and Endangered Species Program (NHESP). However, these areas are not within the limits of the proposed Projects. No federally identified critical habitats are located at the Airport.

Attachment A Figures 3-1 to 3-3 identify the environmental constraints of the Project site.

Describe the proposed project and its programmatic and physical elements:

*NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.*

### Proposed Project

In May 2022, the Cape Cod Gateway Airport Commission, the Massachusetts Department of Transportation – Aeronautics Division and the Federal Aviation Administration approved the 2020 Master Plan. The Master Plan Update evaluated aviation demand forecasts, facility requirements<sup>1</sup>, airport access, airport geometry, and navigation aids over a 20-year planning horizon. The Master plan recommendations are needed to plan for meeting FAA airport safety standards as well future aviation demand, including rehabilitation of existing infrastructure.

The existing and future Aircraft Approach Category (AAC)- Airplane Design Group (ADG) is C/D-III. These are derived from the features of the most demanding aircraft using the Airport on a regular basis coupled with the best available instrument approach minimums. The first component, depicted by a letter, is the Aircraft Approach Category (AAC) and relates to aircraft approach speed (operational characteristics). The second component, depicted by a Roman numeral, is the Airplane Design Group (ADG) and relates to either the aircraft wingspan or tail height (physical characteristics), whichever is most restrictive. While the Airbus 220-300 and design

<sup>1</sup> The existing and future AAC-ADG is C/D-III. While design group C-III is used for airfield dimensional standards, the runway length analysis. Facility requirements looked at a family of aircraft, as aircraft size is not directly commensurate with runway needs.

group C-III is used for airfield dimensional standards, the runway length **analysis**, facility requirements looked at a family of aircraft, as aircraft size is not directly commensurate with runway needs.

The Master Plan process received extensive public input regarding proposed improvements to the Airport resulting in a plan that both meets the goals of the Airport and Airport users and addresses neighborhood concerns. These important safety and infrastructure projects will serve to bring the Airport's geometry into compliance with Federal Aviation Administration ("FAA") standards (FAA AC 150/5300-13A, Airport Design) and meet current forecasted demand for airport use and hangar space. Components (the "Projects") to be implemented over the next 20-year period include:

- Runway Extension;
- Runway Safety Area Enhancements;
- Taxiway Modifications;
- Terminal Improvements;
- General Aviation (GA) Improvements; and
- Non-Aeronautical Land Use Development Areas.

The Projects are described in detail below.

#### **Runway Extension**

Runway 15-33 serves as the current primary instrument flight rules (IFR) runway. The Project proposes a runway extension to both ends of Runway 15-33. The Runway 15 end would be lengthened by 895 feet with a 695-foot displaced threshold. The Runway 33 end would be lengthened by 400 with a 550-foot displaced threshold that includes the entire extension along with the existing 150-foot displaced threshold.

#### **Runway Safety Area Enhancement**

Runway safety areas (RSAs) are defined by the FAA as surfaces surrounding a runway that are prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. Runway 6-24 serves as the current primary visual flight rule (VFR) runway. The Project would install a 200-foot by 400-foot engineered material arresting system (EMAS) to the Runway 24 end.

#### **Taxiway Modifications**

The Project will include the following modifications to taxiways A, B, C, D, and E to meet FAA geometry standards and allow for future aeronautical development;

- Taxiway A will be extended to meet the standards of a full-length parallel taxiway to Runway 15-33.
- Taxiway D will be reconfigured to a partial parallel taxiway at a standard 400-foot separation east of Runway 15-33 from Taxiway B to across from Taxiway A1 will be constructed along with a runup area along the north side of the proposed partial parallel taxiway. A blast fence/wall will be constructed next to the proposed run-up pad for noise protection.
- The portion of Taxiway D between the proposed partial parallel taxiway and Taxiway A will be removed.
- Taxiway E and the existing runup pit will also be removed.
- Taxiway B will be moved to a standard 400-foot separation south of Runway 6-24 and extended north until it is located south of the existing glide slope and the TOFA remains clear of the glide slope.

- Taxiway C1 between Runway 6-24 will be removed.
- A midfield taxiway from Taxiway B to Runway 6-24. Taxiway D between Runway 6-24 and the existing Taxiway B segment will be removed.

### **Terminal Improvements**

Assessment of Airport needs identified that an overall deficit of 5,000 to 10,000 square feet (sf) of terminal space is needed to meet projected 150 peak hour passenger requirements and 20,000 to 25,000 sf to meet the estimates for 200 peak hour passenger requirements. Therefore, an expansion of the existing passenger terminal (approximately 30,600 sf) is needed to accommodate current and future demand. The reconfiguration and expansion of the terminal to accommodate additional space needs is preferred to the construction of a new facility due to the relative age of the existing terminal building (less than 20 years) and the availability of land to the north and south of the terminal building (currently parking lots). The existing terminal will be reconfigured to accommodate for deficiencies in the secure hold room, security screening checkpoint and queue area, outbound baggage, screening and makeup, and baggage claim and inbound baggage handling.

### **General Aviation (GA) Improvements**

The Airport currently has two GA areas on the airfield: North Ramp and East Ramp. Transient aircraft are parked on both the North and East Ramps. The Airport is reserving space on either side of the terminal to plan for electric aircraft charging for both GA and commercial aircraft. Total ramp space for transient aircraft is approximately 369,500 sf. Based on the Master Plan assessment, there is an existing shortage of conventional hangar space with an identified need for up to six additional individual hangars, up to eight new conventional hangars of various sizes, up to 67,000 SF of additional ramp space, and between 40,000 to 67,000 sf of additional apron space to be built. On the North Ramp, approximately 8.7 acres of available land were identified north of the existing ramp and west of Taxiway A. On the East Ramp, approximately 31.3 acres of available land were identified north and east of the existing East Ramp. With the relocation of Taxiway B, space is opened up that is occupied by the current taxiway. Potential uses for the development areas are:

- Aviation education center
- Aviation museum
- New hangars (on demand basis)
- New ramp space (on demand basis)
- Aviation businesses including maintenance, charters, or flight school.

### **Non-Aeronautical Land Use Development Areas**

Existing non-aeronautical land use development areas are located to the southwest and east of the airport terminal building. These areas total approximately 97.2 acres and are currently being leased except for the densely forested area north of Runway 15-33, comprised of 37.5 acres. Non-aeronautical areas on airport-owned property are generally best utilized as industrial or commercial land uses.

### Proposed Easement/Fee Acquisition

Approximately 44.1 acres of land within the existing Runway 6-24 and proposed Runway 15-33 runway protection zones (RPZs)<sup>2</sup> are off Airport property. The Project plans to acquire these sites as avigation easement or in fee on a willing seller basis. In addition, approximately 0.3 acres of land within the proposed Taxiway A taxiway object free area (TOFA), approximately 0.2 acres of land within the proposed Runway 33 runway safety area (RSA), and 1.3 acres of land within the Runway 33 runway object free area (ROFA) will be acquired. The easement acquisitions for existing and future airspace surfaces will be essential to control and remove obstruction as necessary for aviation safety and compliance with FAA standards.

See Attachment A Figure 4 for proposed projects.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Each of the alternative development strategies presented below would provide sufficient facilities to accommodate the forecasted aviation demand presented in the Master Plan and satisfy the subsequent facility requirements, meet applicable FAA design standards, and provide methods to meet local constraints and address community concerns. The alternatives focus on ways by which the Airport will meet the Project's purpose and need: comply with Part 77 airspace regulations; improve safety; improve future airport operation and residential compatibility; and accomplish the proposed Airport improvements.

### Airside Alternatives

#### ***Alternative 1 (No Build Alternative)***

The No Build Alternative does not meet the existing and future facility requirements related to runway length as no construction is proposed. The No-Build Alternative makes no airfield safety improvements, i.e., no additional hangars would be constructed, and no modifications would be made to the runways and taxiways. The Airport would neither be able to accommodate the forecasted demand for aircraft storage and increase in the annual service volumes nor be able to enhance Airport facilities to meet FAA airfield safety standards. For these reasons, the "no build" alternative is not the preferred alternative.

#### ***Alternative 2***

This alternative is a maximum build out scenario. It includes a 1,295-foot extension to the Runway 15 end and a 400-foot extension to the Runway 33 end. The Runway 33 extension would be a displaced threshold and the Runway 33 landing threshold would remain in its current location. In this alternative, Taxiway A extends to the new runway ends and connect to the runway at a 90-degree angle. All areas within the taxiway object free areas (TOFAs) and relocated perimeter road located off Airport property would be acquired when the land becomes available on a willing seller basis.

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<sup>2</sup> Runway protection zones are a trapezoidal area "off the end of the runway end that serves to enhance the protection of people and property on the ground" in the event an aircraft lands or crashes beyond the runway end

Alternative 2 meets the requirement of 6,000 feet of both accelerated stop distance available (ASDA) and landing distance available (LDA) in both directions of Runway 15 and 33. Relocating the Runway 15 landing threshold requires obstruction removal and creates an incompatible land use by having Victory Chapel (a house of worship) within the runway protection zone (RPZ). This alternative does not meet FAA standards as the Victory Chapel within an RPZ is an incompatible land use. In addition, the obstructions (above ground utilities, man-made structures, and natural obstructions) that would need to be removed or lowered for this alternative make constructability challenging and costly.

### ***Alternative 3***

This alternative proposes a 1,258-foot extension to the Runway 15 end and a 400-foot extension to the Runway 33 end. This alternative includes a 1,058-foot displaced landing threshold on the Runway 15 end and a 550-foot displaced threshold on the Runway 33 end. In this alternative, Taxiway A extends to the new runway ends and connects to the runway at a 90-degree angle. All areas within the TOFAs and relocated perimeter road located off Airport property would be acquired when the land becomes available on a willing seller basis. This alternative results in reduced obstruction impacts and enhanced land use compatibility compared to alternative 2. While it does not meet the Runway 15 recommended LDA of 6,000 feet, it improves the Runway 15 LDA by 200 feet compared to existing conditions. This alternative meets the Runway 33 runway length need and improves the Runway 15 landing distance by 200 feet. This alternative has minimal man-made obstructions and a reduced number of natural obstructions compared to Runway 15-33 Alternative 2.

### ***Alternative 4 (Preferred Alternative)***

This alternative proposes an 895-foot extension to the Runway 15 end and a 400-foot extension to the Runway 33 end. This alternative includes a 695-foot displaced threshold on the Runway 15 end and a 550-foot displaced threshold on the Runway 33 end. Taxiway A is extended to the new runway ends and connected to the Runway 15 and 33 ends at 90-degree angles. All areas within the TOFAs and relocated perimeter road located off Airport property would be acquired when the land becomes available on a willing seller basis. This alternative results in reduced obstruction impacts and enhanced land use compatibility compared to alternative 2. While it does not meet the Runway 15 recommended LDA of 6,000 feet, it improves the Runway 15 LDA by 200 feet compared to existing conditions.

This alternative removes excess pavement and focuses on the paving necessary to meet the facility requirements, where possible. This alternative also has minimal man-made obstructions and a reduced number of natural obstructions compared to alternative 2. This alternative also removes the portion of Taxiway E from the proposed partial parallel taxiway to Runway 15-33 and constructs a partial parallel at 400-foot standard separation east of Runway 15-33 from Taxiway B crossing Runway 15-33 midfield (connecting to existing Taxiway D coming out of the North Ramp). Taxiway D between Taxiway A and this new parallel taxiway is also removed. This alternative prevents any operational concerns of two-way taxiing occurring in front of the terminal building and eliminates direct access from the North Ramp, and the y-shaped runway crossing but still has a high-energy crossing on Runway 15-33. This alternative impacts the Upper Gate Pond.



## **Taxiway Alternatives**

The existing Taxiway D has multiple non-standards geometry conditions. Two build alternatives were assessed to improve current conditions.

### ***Alternative 1 (No Build Alternative)***

The No Build Alternative does not meet the existing and future facility requirements related to taxiway geometry and enhancements since no construction is proposed. The No-Build Alternative makes no FAA operational and safety design improvements; therefore, the “no build” alternative is not the preferred alternative.

### ***Alternative 2 (Preferred Alternative)***

Alternative 2 proposes to construct a partial parallel taxiway with a 400-foot standard separation east of Runway 15-33 from Taxiway B to existing Taxiway A1. This construction includes the removal of Taxiway D between Taxiway A and this new parallel taxiway. This prevents any operational concerns of two-way taxiing occurring in front of the terminal building and eliminates direct access from the North Ramp, the y-shaped runway crossing, and the high-energy crossing on Runway 15-33. This project impacts the edge of Upper Gate Pond. This alternative also includes constructing a run-up area along the north side of the proposed partial parallel taxiway to replace the existing Taxiway E run-up pit that will be removed. The current run-up pit is at a lower elevation and surrounded by trees, which shield the neighboring communities from the run-up sound impact. It is recommended that blast fence/wall will be constructed next to the proposed run-up pit both for blast protection as well as noise protection. This run-up area would accommodate the existing fleet of aircraft using the run-up pit. The run-up pit and associated object free area will remain clear of the access/maintenance road. This alternative also removes Taxiway E. Alternative 2 prevents two-way taxi operations in front of the terminal, which therefore prevents head-to-head potential in front of the terminal. Aircraft may have longer taxi times to/from the terminal but may have shorter taxi times should the North Ramp be expanded.

The proposed layout for Taxiway ‘D’ will impact BVW, bank, and land under water. The airport is considering two design options for Alternative 2 for limiting resource area impacts to Upper Gate Pond:

- Alternative 2A: Conventional fill on the north side of the taxiway with steep side slopes to limit the extent of impacts; and,
- Alternative 2B: A concrete retaining wall to further limit the extent of impacts. A bathymetric survey of Upper Gate Pond will provide the water depth and topography of the pond bottom; this information will dictate the extent fill for design Alternative #2A (conventional fill).

Design Alternative #2B (retaining wall) potentially offers reduced environmental impact to Upper Gate Pond, however, this alternative is anticipated to be higher costs, due to construction challenge, and may result in funding challenges (limits on available FAA Regional Funding). The EIR phase will further quantify the constructability, cost, and environmental impacts for each design option identified for Alternative 2.

### ***Alternative 3***

This alternative maintains the run-up pad in its existing location. This alternative proposes to construct a partial parallel at 400-foot standard separation east of Runway 15-33 from Taxiway B crossing Runway 15-33 midfield (connecting to existing Taxiway D coming out of the North Ramp). This construction includes the removal of Taxiway D between Taxiway A and this new parallel taxiway. This prevents any operational concerns of two-way taxiing occurring in front of the terminal building and eliminates direct access from the North Ramp, and the y-shaped runway crossing but still has a high-energy crossing on Runway 15-33. This project impacts Upper Gate Pond. This alternative would also remove the portion of Taxiway E from the proposed partial parallel taxiway to Runway 15-33. Although it improves conditions to the No Build by providing a standard 400-foot runway-taxiway centerline separation and improves the following nonstandard FAA geometry conditions: eliminates non-standard runway-taxiway intersection angles, the y-shaped runway crossing, and direct access, it does not fully meet FAA geometry standards due to the high-energy crossing.

### **Runway 6-24 Alternative Enhancements**

#### ***Alternative 1 (No Build Alternative)***

The No Build Alternative does not meet the existing and future facility requirements related to runway geometry since no construction is proposed. The No-Build Alternative makes no FAA operational and safety design improvements; therefore, the “no build” alternative is not the preferred alternative.

#### ***Alternative 2 (Preferred Alternative)***

The existing Runway 6-24 has multiple non-standards geometry conditions. To address these conditions, this alternative would include:

- Moving Taxiway B to a standard 400-foot separation from Runway 6-24. This would reduce taxi time and open up additional land for aeronautical development potential.
- Constructing a perpendicular crossover taxiway south of the existing glide slope so that the new taxiway’s TOFA remains clear of the glide slope. It is located approximately 3,480 feet from the Runway 6 threshold.
- Removing Taxiway C1 and keeping the portion of existing Taxiway B connecting to Runway 6-24.
- Constructing a midfield taxiway to Taxiway B.
- Keeping Taxiway D exit to Taxiway C as an acute-angled exit only taxiway.

This enhancement also adds an EMAS beyond the existing Runway 6 departure end (near the Runway 24 threshold). This alternative meets FAA design standards by providing a standard 400-foot runway-taxiway centerline separation, eliminating high energy intersections, and addressing direct access and non-standard runway-taxiway intersection angles. This alternative also meets facility requirements by minimizing taxi distance and opening up space available for aviation development currently not available due to the larger than standard Runway 6-24 to Taxiway B separation. This alternative proposes the addition of approximately 27 acres of new impervious pavement.



## Terminal Improvements Alternatives

### *Terminal Alternative 1 (No Build Alternative)*

This alternative has the advantage of no impact to adjacent parking areas and other site infrastructure. However, studies of various 'interior-only' reconfiguration options were unsuccessful in resolving all space deficiencies identified in the 150 peak hour passenger analysis. Therefore, Terminal Alternative 1 is not viewed as a viable long-term solution to accommodate the passengers and operational needs for the forecasted demand.

### *Terminal Alternative 2 (Preferred Alternative)*

This alternative reconfigures existing interior space for maximum efficiency of use and plans for isolated building additions of 5,000 to 20,000 square feet to accommodate increased passenger and baggage demand in key areas. Interior reconfiguration allows for the additions to be smaller than would otherwise be required. In this alternative, the reconfiguration maintains the basic terminal organization: a single terminal with secure departures to the south, arrivals/non-secure departures to the north, with airline operations/ticketing in the center. This alternative has the added advantage of a feasibly phased implementation. As such, improvements could begin with interior reconfiguration for maximum efficiency and in the future, follow-on with one or multiple isolated space additions, as appropriate, to meet demand and as funding becomes available.

### *Terminal Alternative 3 (New Functional Organization, Incremental Improvements)*

This alternative changes the core functional organization of the terminal building with no additional square footage. Rather than a single terminal with departures and arrivals at each end, the terminal is re-organized to be a secure terminal on the south end (with both departures and arrivals/bag claim functions), and an attached, but functionally independent, non-secure terminal at the north end with its own departures and arrivals/bag claim functions for non-secure flights. The advantage of this approach is improved passenger flow, allowing secure arrivals/departures to remain contained at one end of the terminal and eliminating the need for secure arrivals to traverse the ramp or terminal to access baggage claim at the north end. However, the capital and operational cost for duplication of baggage claim is not warranted by the level of air traffic. Also, the future of the non-secure departures is uncertain, as security requirements can and do change over time, as do airline flight schedules and destinations. Accordingly, alternative 3 is not a viable long-term solution to accommodate the passengers and operational needs for the forecasted demand.

**NOTE:** *The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

### Upper Gate Pond and Wetlands

- The construction of a parallel taxiway (Taxiway D) to Runway 15-33 will likely result in impacts to Upper Gate Pond and wetland buffer and pond buffer impact including the 200-foot wetland buffer put in place by the Cape Cod Commission around Upper Gate Pond. Appropriate mitigation measures will be adopted to minimize impacts according to local and state regulations.

### Stormwater

- The proposed stormwater management system will be designed to comply to the maximum extent practicable with MassDEP's stormwater management regulations.
- Structural controls and management practices will be implemented during construction to reduce the amount of stormwater discharged to surface waters.

### Environmental Justice and Public Outreach

- The Proponent will adopt various public engagement strategies including creating a website for the proposed Projects, holding multiple community meetings, and sharing flyers about the Projects to afford the public opportunities to learn more about the Projects and to reach out with any questions or concerns with the goal of minimizing community impacts, as practicable.
- All outreach advertisements will be conducted in English, Spanish and Portuguese.

### Greenhouse Gas

Installation of roof mounted solar arrays on hangars to offset GHG emissions

- Upgrade street and parking lot lights to LED
- Implementation of electric vehicle charging stations and electric aircraft charging stations (as technology advances)

If the project is proposed to be constructed in phases, please describe each phase:

**The Projects will be constructed in three phases as funding is allocated per capital improvement plans (CIP):**

- Phase I covers the short-term airport growth (2022 to 2026)
- Phase II covers the medium-term airport growth (2027 to 2031)
- Phase III covers the long-term airport growth (2032 to 2040)

#### **Phase I Projects:**

- Relocate and Extend Taxiway B
- Reconstruct and Realign Taxiways D and E at Runway 15(including Run-up pit)
- Terminal Upgrades
- Runway Extension Easements

#### **Phase II Projects: :**

- Tree Clearing for Runway 15-33 Extension
- Extension of Runway 15-33 and Taxiway A (including New taxiway A1 and A4)
- Enhance Land Use Control (Easement/Fee)

### Phase III Projects:

- Install Runway 24 EMAS
- Enhance Land Use Control (Easement/Fee)

### **AREAS OF CRITICAL ENVIRONMENTAL CONCERN:**

Is the project within or adjacent to an Area of Critical Environmental Concern?

☐ Yes (Specify:)

☒ No

If yes, does the ACEC have an approved Resource Management Plan? \_\_\_ Yes \_\_\_ No;

If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? \_\_\_ Yes \_\_\_ No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

### **RARE SPECIES:**

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see [http://www.mass.gov/dfwele/dfw/nhosp/regulatory\\_review/priority\\_habitat/priority\\_habitat\\_home.htm](http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/priority_habitat/priority_habitat_home.htm))

☒ Yes (Specify **PH 273, PH 278 and EH 276**) ☐ No

Portions of the Airport property are within mapped Habitat as identified above. No mapped habitats are located within the proposed projects limits described above (see Figure 3-1 in Attachment A).

### **HISTORICAL /ARCHAEOLOGICAL RESOURCES:**

Does the project site include any structure, site or district listed in the State Register of Historic Place

or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐ Yes (Specify ) ☒ No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic

or archaeological resources? ☐ Yes (Specify\_\_\_) ☐ No

### **WATER RESOURCES:**

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? \_\_\_ Yes X No; if yes, identify the ORW and its location. \_\_\_\_\_

*(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)*

Are there any impaired water bodies on or within a half-mile radius of the project site? \_\_\_ Yes X No; if yes, identify the water body and pollutant(s) causing the impairment:

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? \_\_\_ Yes X No

**STORMWATER MANAGEMENT:**

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

Proposed stormwater management for individual projects will comply with current DEP regulations. Mitigation measures for an increase in stormwater runoff resulting from a net increase in proposed impervious areas will include traditional stormwater management measures such as groundwater recharge including infiltration basins, infiltration trenches, and/or detention basins. Stormwater runoff from the Projects limits will be managed through the use of the Airport's existing stormwater management system and the installation of new drainage culverts. The intent of the system is to prevent an increase in peak stormwater runoff and to provide treatment when and where necessary. To meet this goal, management of runoff will include both temporary and permanent Best Management Practices (BMPs) so that runoff will be appropriately handled both during and after construction. As the Airport is over the EPA-designated Sole Source Cape Cod Aquifer, all BMPs will comply with standards necessary for work in this critical area. The proposed stormwater management system for each project phase will be designed to comply to the maximum extent practicable with MassDEP's stormwater management regulations. The use of BMPs in the proposed Project is expected to meet the goal of no increase in peak stormwater runoff and provide stormwater treatment where needed. Post-construction BMPs may include swales, bioretention areas, infiltration basins, catch basins with sediment traps, and oil and water separators will be used.

Structural controls and management practices will be implemented during construction to reduce the amount of stormwater discharged to surface waters. Temporary erosion and sediment controls (E/SC) will be implemented to prevent sediment from entering the stormwater drainage system during construction activities. Temporary BMPs will be employed including silt socks, silt fences, inlet protection, and stabilized construction entrances.

**MASSACHUSETTS CONTINGENCY PLAN:**

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes   X   No    ; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

The following RTNs for the project site are currently being regulated under the following Massachusetts Contingency Plan (MCP) RTNs:

**Cape Cod Gateway Airport - RTN 4-26347:** This RTN is associated with onsite and offsite historical releases of PFAS and 1,4-dioxane to soil and groundwater. Response actions are being performed as an Immediate Response Action (IRA) as well as under MCP Comprehensive Response Actions. A Phase III Identification, Evaluation, and Selection of Comprehensive Remedial Action Alternatives was submitted for the property in June 2022. A Permanent Solution or Temporary Solution has not yet been achieved for this RTN and response actions are ongoing.

**Upper Gate Pond and Lewis Pond at Cape Cod Gateway Airport – RTN 4-28577:** This RTN is associated with presence of polycyclic aromatic hydrocarbons (PAHs) and lead in pond sediments. A Phase I Report and Tier Classification was submitted in November 2021. A Permanent Solution or Temporary Solution has not yet been achieved for this RTN and response actions are ongoing.

**Aircraft Accident at Cape Cod Gateway Airport – RTN 28769:** This RTN was associated with the sudden release of aviation gas and motor oil from an airplane crash in April 2021. A Permanent Solution Statement with No Conditions was submitted for the RTN in June 2021.

**July 24th Aircraft Accident at Barnstable Municipal Airport – RTN 28769:** This RTN was associated with the sudden release of aviation gas from an airplane accident in July 2016. A Release Notification, IRA Completion Report, and Permanent Solution Statement was submitted for the RTN in September 2016.

**Rectrix Aerodrome Center at 730 Barnstable Road – RTN 4-23484:** This RTN was associated with the sudden release of aviation gas from an airplane accident in July 2016. A Class A-1 RAO was submitted for the RTN in October 2011.

**Colgan Air, Inc. at Barnstable Municipal Airport – RTN 4-14472:** This RTN was associated with the sudden release of aviation gas due to overfilling on airplane on in August 2011. A Class A-1 RAO was submitted for the RTN in June 1999.

**UST Removal at Barnstable Municipal Airport – RTN 26358:** This RTN was associated with the detection of a release of aviation gas during the removal of an Underground Storage Tank (UST) in September 2016. A Release Notification, IRA Completion Report, and Permanent Solution Statement was submitted for the RTN in November 2016.

**Barnstable Municipal Airport – RTN 4-823:** This RTN is associated with the release of volatile organic compounds and petroleum- related compounds to soil and groundwater. Three other RTNs (4-11841, 4-12048, and 4-12678) are linked RTN 4-823. A Phase V Completion Statement, Release Abatement Measure Completion Statement, and Permanent Solution Statement with No Conditions was submitted for the RTN in September 2020.

**Cape Flight Hangar at Barnstable Municipal Airport – RTN 4-15715:** This RTN is associated with the release of aviation fuel during transfer from an Aboveground Storage Tank (AST) to a refueling truck. Response Actions were performed as an IRA and a Class A-1 Response Action Outcome (RAO; now a Permanent Solution Statement with No Conditions) was submitted for the RTN in May 2002.

**Barnstable Municipal Airport, Hangar Bay #1 – RTN 12048:** This RTN was associated with historical releases of chlorinated solvents to soil and groundwater. A Downgradient Property Status (DPS) Opinion was submitted for this RTN in October 1997. Since a DPS was submitted, no further response actions are being performed for this RTN.

**Blackburn Auto Salvage at 211 Airport Road – RTN 4-1081:** This RTN was associated with historical releases of oil and hazardous material (OHM) resulting from former use as a auto salvage facility. A Release Abatement Measure Completion Report and Class A-2 RAO were submitted for the RTN in October 2008.

These releases are, or have, impacted groundwater conditions at the project site and response actions are ongoing by the Responsible Party and MassDEP

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes \_\_\_ No X;  
if yes, describe which portion of the site and how the project will be consistent with the AUL:

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?

Yes \_\_\_ No X ; if yes, please describe:

**SOLID AND HAZARDOUS WASTE:**

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood.

The contractor will apply relevant and practicable procedures to allow for the reuse and recycling of construction materials. A Construction Waste Management Plan will be developed to ensure that a minimal amount of waste debris is disposed of in landfills. For materials that cannot be recycled, solid waste will be transported in covered trucks to an approved solid waste facility per the DEP Regulation for Solid Waste Facilities, 310 CMR 16.00.

*(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)*

Will your project disturb asbestos containing materials? Yes \_\_\_ No X;  
if yes, please consult state asbestos requirements at  
<http://mass.gov/MassDEP/air/asbhom01.htm>

Describe anti-idling and other measures to limit emissions from construction equipment:

The construction contract will require contractors to use several measures to reduce potential emissions and minimize impacts from construction vehicles including:

- Encouraging contractors to use construction equipment EPA Tier 4 equipment or equipment retrofitted with diesel emission control devices to the greatest extent practicable.
- Using Ultra-Low Sulphur Diesel for all trucks and construction machinery.
- Maintaining an “idle free” work area.
- Minimizing exposed storage of debris on-site through measures such as wetting soils prior to disturbing and covering stockpiles

**DESIGNATED WILD AND SCENIC RIVER:**

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes \_\_\_ No X;  
if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the “outstandingly remarkable” resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?

Yes \_\_\_ No X; if yes, specify name of river and designation: \_\_\_\_\_;

if yes, will the project result in any impacts to any of the designated “outstandingly remarkable”

resources of the Wild and Scenic River or the stated purposes of a Scenic River.

Yes \_\_\_ No X;

if yes, describe the potential impacts to one or more of the “outstandingly remarkable” resources or

stated purposes and mitigation measures proposed.

## **ATTACHMENTS:**

1. List of all attachments to this document.  
[Attachment A: Project Figures](#)  
[Attachment B: Circulation List](#)  
[Attachment C: Permit List](#)  
[Attachment D: RMAT Tool](#)  
[Attachment E: EJ Mapping](#)  
[Attachment F: EJ Distribution List and Screening Form](#)
2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries. [Attachment A Figures 1 and 2](#)
3. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities. [Attachment A Figures 3-1 to 3-3](#)
4. Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.  
[Attachment A Figures 3-1 to 3-3](#)
5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).  
[Attachment A Figure 4](#)
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2). [Attachment B](#)
7. List of municipal and federal permits and reviews required by the project, as applicable. [Attachment C](#)
8. Printout of output report from RMAT Climate Resilience Design Standards Tool, available [here](#). [Attachment D](#)
9. Printout from the EEA [EJ Maps Viewer](#) showing the project location relative to Environmental Justice (EJ) Populations located in whole or in part within a 1-mile and 5-mile radius of the project site. [Attachment E, Figure E-1](#)



## **LAND SECTION – all proponents must fill out this section**

### **I. Thresholds / Permits**

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1)) X Yes \_\_\_ No; if yes, specify each threshold:

- o 11.03(1)a(2) Creation of ten or more acres of impervious area.

### **II. Impacts and Permits**

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>12<sup>1</sup> ac</u>	<u>0.25 ac</u>	<u>12.25 ac</u>
Internal roadways	<u>90<sup>2</sup></u>	<u>21</u>	<u>111</u>
Parking and other paved areas	<u>50</u>	<u>--</u>	<u>50</u>
Other altered areas	<u>27</u>	<u>--</u>	<u>27</u>
Undeveloped areas	<u>460</u>	<u>-21</u>	<u>439</u>
<b>Total: Project Site Acreage</b>	<u>639</u>	<u>--</u>	<u>639</u>

<sup>1</sup> Existing Terminal Building Footprint (43,097sf)

<sup>2</sup> Includes runways, taxiways, apron spaces and other aircraft movement surfaces

A. Has any part of the project site been in active agricultural use in the last five years? \_\_\_ Yes X No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

B. Is any part of the project site currently or proposed to be in active forestry use? \_\_\_ Yes X No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

C. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? \_\_\_ Yes X No; if yes, describe:

D. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? \_\_\_ Yes X No; if yes, does the project involve the release or modification of such restriction? \_\_\_ Yes \_\_\_ No; if yes, describe:

E. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? \_\_\_ Yes X No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes \_\_\_ No X; if yes, describe

### **III. Consistency**

A. Identify the current municipal comprehensive land use plan

Title: **Town of Barnstable Comprehensive Plan**

Date: **2010**



B. Describe the project's consistency with that plan with regard to:

1) economic development

The Town of Barnstable's Comprehensive Plan is in place to promote positive economic change and to support the prioritization of building and maintaining appropriate infrastructure. The plan is also intended to promote sustainable development and encourage the growth of new economic sectors.

The proposed Projects support economic development goals highlighted in the plan by maintaining the facilities at the Airport and responding to the Airport's current and future aviation needs.

2) adequacy of infrastructure

The plan calls for the provision of well-maintained public facilities and services that serve the current and future social, economic, cultural, safety, traffic, and communication needs of the community. The Projects aligns with this goal as it serves to improve existing infrastructure to increase operational safety and efficiency at the Airport and to meet future forecast demand. Improvements proposed will be constructed in accordance with FAA design criteria and safety standards to improve operations.

3) open space impacts

Barnstable's comprehensive plan calls for the implementation of land use policies to achieve a balance between the location, preservation, and protection of uses of land (including housing, commerce, recreation, open space, and natural resources) along with infrastructure necessary to support existing land uses and anticipated changes in land use.

The Projects are consistent with open space-related goals such as Goal 2.5.1, which requires the prevention of loss or degradation of critical wildlife and plant habitat, minimization of the impact of new development on wildlife and plant habitat, maintaining existing populations and species diversity, and maintaining areas which will support wildlife's natural breeding, feeding and migration patterns. The Project is predominantly located within the existing Project site and therefore will not have significant permanent impacts to designated open space. All practicable measures will be taken to limit any impacts to open space.

4) compatibility with adjacent land uses

The Projects are proposed predominantly within the Airport property and will enhance existing transportation options and land uses (business and industrial uses). The Projects are also consistent with adjacent land uses in Barnstable. Directly to the south of the airport is Route 28, a major regional east-west transportation corridor on Cape Cod that provides access from Falmouth to Orleans and connects the Cape Cod Regional Transit Authority's (CCRTA) Sealine and H2O transit

service lines to the towns along the corridor. The airport is also bordered by Route 132, a state highway in the town of Barnstable. The highway, also identified as Hyannough Road, is the main link between greater Barnstable and the village of Hyannis and connects Routes 28 and 6A. The airport is also within close proximity to the Hyannis Transportation Center, providing access to and from the airport, linking travel options for residents and visitors flying into and out of the airport to the Cape Cod Regional Transit Authority for bus or train travel. The CapeFLYER is a summer weekend passenger train that runs from South Station to Hyannis, with stops in Braintree, Brockton, Middleborough/Lakeville, Wareham Village, Buzzards Bay and Bourne.

C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)

RPA:

Title: Cape Cod Regional Policy Plan Date: December 2018

D. Describe the project's consistency with that plan with regard to:

1) economic development

One of Cape Cod Regional Policy's objectives is to coordinate the siting of capital facilities and infrastructure to enhance the efficient provision of services and facilities that respond to the needs of the region. The policy hopes to provide an efficient and reliable transportation system that will serve the current and future needs of the region and its people. The Projects plan to address existing space deficiencies at the terminal building by expanding the existing terminal building to approximately 55,000 sf to meet existing demand (existing terminal is approximately 30,600 SF) and future demand at 200 peak hour passengers.

2) adequacy of infrastructure

The policy also lists the improvement of safety and elimination of hazards for all users of Cape Cod's transportation system as one of its goals. The proposed improvements will increase operational safety and efficiency at the Airport by bringing the airport layout and infrastructure into conformity with all updated FAA standards and objectives.

The proposed improvements to runways, taxiways, and the Airport terminal building will allow the Airport to continue to provide adequate and safe infrastructure at the Airport, a vital transportation link for the Cape Cod transportation system.

3) open space impacts

The Cape Cod Regional Policy Plan aims to conserve, preserve, or enhance the network of open space that contributes to the region's natural and community resources and systems. Open space is an important part of a larger network of natural resources on Cape Cod that provides a habitat for the Region's diverse species, offers recreation opportunities, and protects the drinking water supply. Minimal impacts are anticipated to open space to the north of Runway 15-33. All practicable measures will be taken to avoid significant impact to the Upper Gate Pond and surrounding open space.

## **RARE SPECIES SECTION**

### **I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

*(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)*

B. Does the project require any state permits related to **rare species or habitat**? \_\_\_ Yes X No

C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? \_\_\_ Yes X No.

While the Airport property contains mapped rare species habitat as identified in Figure 3-1, none of the proposed projects described in this document will occur within these areas.

D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

### **II. Impacts and Permits**

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? \_\_\_ Yes \_\_\_ No. If yes,

1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? \_\_\_ Yes \_\_\_ No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? \_\_\_ Yes \_\_\_ No; if yes, attach the letter of determination to this submission.
2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? \_\_\_ Yes \_\_\_ No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts
3. Which rare species are known to occur within the Priority or Estimated Habitat?
4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? \_\_\_ Yes \_\_\_ No
5. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? \_\_\_ Yes \_\_\_ No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? \_\_\_ Yes \_\_\_ No

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ☐ Yes ☐ No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

## WETLANDS, WATERWAYS, AND TIDELANDS SECTION

### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? X Yes \_\_\_ No; if yes, specify which permit:

For work related to Taxiway D:

- Order of Conditions from Barnstable Conservation Commission
- MassDEP 401 Water Quality Certificate

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

### II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? X Yes \_\_\_ No; if yes, has a Notice of Intent been filed? \_\_\_ Yes X No; if yes, list the date and MassDEP file number: \_\_\_\_\_; if yes, has a local Order of Conditions been issued? \_\_\_ Yes \_\_\_ No; Was the Order of Conditions appealed? \_\_\_ Yes \_\_\_ X No. Will the project require a Variance from the Wetlands regulations? \_\_\_ Yes X No.

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

Construction associated with the Taxiway D realignment will impact Upper Gate Pond resource areas including Inland Bank, Land Under Water and Bordering Vegetated Wetlands. Impacts are anticipated to result from proposed embankment fill for the northern slide slope and/or proposed retaining wall associated with the taxiway. These impact quantities are currently being investigated and will be provided in the EIR stages for the Project. Due to existing topography and FAA runway to taxiway centerline distance separation requirements, fill within the pond itself will be necessary to construct the taxiway.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

#### Coastal Wetlands

Area (square feet) or  
Length (linear feet) Permanent Impact?

Land Under the Ocean  
Designated Port Areas  
Coastal Beaches  
Coastal Dunes  
Barrier Beaches

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Coastal Banks	_____	_____
Rocky Intertidal Shores	_____	_____
Salt Marshes	_____	_____
Land Under Salt Ponds	_____	_____
Land Containing Shellfish	_____	_____
Fish Runs	_____	_____
Land Subject to Coastal Storm Flowage	_____	_____

Inland Wetlands

Bank (lf)	_____ <u>396 LF</u> _____	_____ <u>Permanent</u> _____
Bordering Vegetated Wetlands	_____ <u>3,427 SF</u> _____	_____ <u>Permanent</u> _____
Isolated Vegetated Wetlands	_____	_____
Land under Water	_____ <u>23,654 SF</u> _____	_____ <u>Permanent</u> _____
Isolated Land Subject to Flooding	_____	_____
Bordering Land Subject to Flooding	_____	_____
Riverfront Area	_____	_____

D. Is any part of the project:

1. proposed as a **limited project**? \_\_\_ Yes X No; if yes, what is the area (in sf)? \_\_\_\_\_
2. the construction or alteration of a **dam**? \_\_\_ Yes X No; if yes, describe: \_\_\_\_\_
3. fill or structure in a **velocity zone** or **regulatory floodway**? \_\_\_ Yes X No
4. dredging or disposal of dredged material? X Yes \_\_\_ No; if yes, describe the volume of dredged material and the proposed disposal site:  
Dredging is anticipated for Taxiway D relocation in Upper Gate Pond. Volume and quantities of dredged materials are TBD.
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? \_\_\_ Yes X No
6. subject to a wetlands restriction order? \_\_\_ Yes X No; if yes, identify the area (in sf): \_\_\_\_\_
7. located in buffer zones? X Yes \_\_\_ No; if yes, how much (in sf) TBD

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? X Yes \_\_\_ No  
Barnstable Wetlands Protection Bylaw (Chapter 237)
2. alter any federally-protected wetlands not regulated under state law? \_\_\_ Yes X No; if yes, what is the area (sf)? \_\_\_\_\_

**III. Waterways and Tidelands Impacts and Permits**

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? \_\_\_ Yes X No; if yes, is there a current Chapter 91 License or Permit affecting the project site? \_\_\_ Yes \_\_\_ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands: \_\_\_\_\_

B. Does the project require a new or modified license or permit under M.G.L.c.91? \_\_\_ Yes X No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current \_\_\_ Change \_\_\_ Total \_\_\_  
If yes, how many square feet of solid fill or pile-supported structures (in sf)? \_\_\_\_\_

C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site: \_\_\_\_\_  
Area of filled tidelands covered by buildings: \_\_\_\_\_

For portions of site on filled tidelands, list ground floor uses and area of each use:

Does the project include new non-water-dependent uses located over flowed tidelands? Yes \_\_\_ No \_\_\_

Height of building on filled tidelands \_\_\_\_\_

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

D. Is the project located on landlocked tidelands? \_\_\_ Yes X No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? \_\_\_ Yes X No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? \_\_\_ Yes X No;  
(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? X Yes \_\_\_ No; if yes, answer the following questions:

What type of dredging? Improvement X Maintenance \_\_\_ Both \_\_\_

What is the proposed dredge volume, in cubic yards (cys) tbd <100 cubic yards \_\_\_\_\_

What is the proposed dredge footprint tbd length (ft) tbd width (ft) tbd depth (ft);

Will dredging impact the following resource areas?

Intertidal Yes\_\_\_ No X; if yes, \_\_\_ sq ft

Outstanding Resource Waters Yes\_\_\_ No X; if yes, \_\_\_ sq ft

Other resource area (i.e. shellfish beds, eel grass beds) Yes\_\_\_ No

X; if yes \_\_\_ sq ft

If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?

If no to any of the above, what information or documentation was used to support this determination?

Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b).

Physical and chemical data of the sediment shall be included in the comprehensive analysis.

Sediment Characterization

Existing gradation analysis results? \_\_\_ Yes \_\_\_ No; if yes, provide results.

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? \_\_\_ Yes \_\_\_ No; if yes, provide results.



Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

Beach Nourishment \_\_\_\_

Unconfined Ocean Disposal \_\_\_\_

Confined Disposal:

    Confined Aquatic Disposal (CAD) \_\_\_\_

    Confined Disposal Facility (CDF) \_\_\_\_

Landfill Reuse in accordance with COMM-97-001 \_\_\_\_

Shoreline Placement \_\_\_\_

Upland Material Reuse \_\_\_\_

In-State landfill disposal \_\_\_\_

Out-of-state landfill disposal \_\_\_\_

*(NOTE: This information is required for a 401 Water Quality*

*Certification.)*

#### IV. Consistency:

- A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? X Yes \_\_\_\_ No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

The proposed project lies entirely within the coastal zone, which is defined by the Coastal Zone Management Program Federal Consistency Review Procedures regulations at 301 CMR 21.99 as encompassing the entirety of Cape Cod, Martha's Vineyard, and Vineyard Sound. The Project as defined also requires review under the National Environmental Policy Act and implementing regulations (see National Environmental Policy Act (CEQ Regulations) 40 Code of Federal Regulations (CFR) parts 1500-1508, U.S. Department of Transportation (DOT) Order 5610.1C, Procedures for Considering Environmental Impacts, and Federal Aviation Administration (FAA) Order 1050.1F Environmental Impacts: Policies and Procedures, and FAA Order 5050.4b, National Environmental Policy Act Implementing Instructions for Airport Actions). As such, it is subject to review under the Coastal Zone Management Plan and potentially subject to consistency certification, the applicable review procedures for which are set forth at 301 CMR 21.07 (see 301 CMR 21.04(2)).

The following sections list each of the Program Policies and Management Principles contained in the Plan and describe how the Project is consistent with the Plan.

#### ***Water Quality***

##### Water Quality Policy #1

*Ensure that point-source discharges in or affecting the coastal zone are consistent with federally-approved state effluent limitations and water quality standards.*

The Project does not propose any new point-source discharges; therefore, this policy is not applicable.

#### Water Quality Policy #2

*Ensure that non-point source ("NPS") pollution controls promote the attainment of state surface water quality standards in the coastal zone.*

New stormwater discharges will meet MA Stormwater Management Standards for redevelopment for existing impervious surfaces and for new development for new impervious surfaces.

#### Water Quality Policy #3

*Ensure that activities in or affecting the coastal zone conform to applicable state and federal requirements governing subsurface waste discharges and sources of air and water pollution and protection of wetlands.*

The Project does not propose any subsurface waste discharges; therefore, this policy is not applicable.

### ***Habitat***

#### Habitat Policy #1

*Protect wetland areas including salt marshes, shellfish beds, dunes, beaches, barrier beaches, salt ponds, eelgrass beds, and freshwater wetlands for their role as natural habitats.*

The Project has minor impacts to inland wetland resource areas associated with the relocation of Taxiway D at Upper Gate Pond. These impacts will be minimized and mitigated as required in accordance with local, state, and federal regulations.

#### Habitat Policy #2

*Promote the restoration of degraded or former wetland resources in coastal areas and ensure that activities in coastal areas do not further wetland degradation but instead take advantage of opportunities to engage in wetland restoration.*

The project site does not contain any degraded or former wetland resource areas to restore.

## ***Protected Areas***

### **Protected Areas Policy #1**

*Assure preservation, restoration, and enhancement of complexes of coastal resources of regional or statewide significance through the Areas of Critical Environmental Concern (ACEC) program.*

**The Project is not located within or in the immediate vicinity of any ACEC, will therefore not have any adverse impacts on an ACEC, and thus complies with this policy.**

### **Protected Areas Policy #2**

*Protect state and locally designated scenic rivers and state-classified scenic rivers in the coastal zone.*

**The Project is not located in or near any state or locally designated scenic rivers; therefore, this policy does not apply.**

### **Protected Areas Policy #3**

*Review proposed developments in or near designated or registered historic districts or sites to ensure that the preservation intent is respected by federal, state, and private activities and that potential adverse effects are minimized.*

**No designated or registered historic districts are located proximate to the project work.**

## ***Coastal Hazards***

### **Coastal Hazard Policy #1**

*Preserve, protect, restore, and enhance the beneficial functions of storm damage prevention and flood control provided by natural coastal landforms, such as dunes, beaches, barrier beaches, coastal banks, land subject to coastal storm flowage, salt marshes, and land under the ocean.*

**The proposed work will not affect beaches and land under the ocean near the project site. No beaches or land under the ocean are in the project area.**

### **Coastal Hazard Policy #2**

*Ensure construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport. Approve permits for flood or erosion control projects only when it has been determined that there will be no significant adverse effects on the project site or adjacent or down coast areas.*

**There is no construction proposed in water bodies or adjacent thereto. This standard is not applicable.**

**Coastal Hazard Policy #3**

*Ensure that state and federally funded public works projects proposed for location within the coastal zone will: (1) not exacerbate existing hazards or damage natural buffers or other natural resources; (2) be reasonably safe from flood and erosion related damage; (3) not promote growth and development in hazard-prone or buffer areas, especially in Velocity zones and ACECs; and (4) not be used on Coastal Barrier Resource Units for new or substantial reconstruction of structures in a manner inconsistent with the Coastal Barrier Resource/Improvements Acts.*

**The Project is not a public works project; therefore, this policy does not apply.**

**Coastal Hazard Policy #4**

*Prioritize public funds for acquisition of hazardous coastal areas for conservation or recreation use, and relocation of structures out of coastal high hazard areas, giving due consideration to the effects of coastal hazards at the location to the use and manageability of the area.*

**The Project does not propose the use of public funds in hazardous coastal areas; therefore this policy does not apply.**

***Port and Harbor Infrastructure***

**Ports Policy #1**

*Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity, and public health.*

**The Project does not include dredging activities associated with port and harbor infrastructure.**

**Ports Policy #2**

*Promote the widest possible public benefit from channel dredging, ensuring that designated ports and developed harbors are given highest priority in the allocation of federal and state dredging funds. Ensure that this dredging is consistent with marine environment policies.*

**The Project does not include dredging activities associated with port and harbor infrastructure.**

### Ports Policy #3

*Preserve and enhance the capacity of Designated Port Areas (DPAs) to accommodate water-dependent industrial uses and prevent the exclusion of such uses from tidelands and any other DPA lands over which a state agency exerts control by virtue of ownership, regulatory authority, or other legal jurisdiction.*

**The Project is not located in a DPA; therefore, this policy does not apply.**

### Ports Management Principle #1

*Encourage, through technical and financial assistance, expansion of water dependent uses in designated ports and developed harbors, re-development of urban waterfronts, and expansion of visual access.*

**This Project is not located in a designated port, developed harbor, or urban waterfront; therefore, this principle does not apply.**

## **Public Access**

### Public Access Management Principle #1

*Improve public access to coastal recreation facilities and alleviate auto traffic and parking problems through improvements in public transportation. Link existing coastal recreation sites to each other or to nearby coastal inland facilities via trails for bicyclists, hikers, and equestrians, and via rivers for boaters.*

**This Project does not involve any coastal recreation facilities, nor will it affect public transportation to recreational facilities; therefore, this principle does not apply.**

### Public Access Management Principle #2

*Increase capacity of existing recreation areas by facilitating multiple uses and by improving management, maintenance and public support facilities. Resolve conflicting uses whenever possible through improved management rather than through exclusion of uses.*

**This Project does not involve existing recreation areas.**

### Public Access Management Principle #3

*Provide technical assistance to developers of private recreational facilities and sites that increase public access to the shoreline.*

**The Project does not involve public access to the shoreline.**

#### Public Access Management Principle #4

*Expand existing recreation facilities and acquire and develop new public areas for coastal recreational activities. Give highest priority to expansions or new acquisitions in regions of high need or limited site availability. Assure that both transportation access and the recreational facilities are compatible with social and environmental characteristics of surrounding communities.*

**The Project does not involve any permanent changes to recreational facilities; therefore, this principle does not apply.**

### **Energy**

#### Energy Policy #1

*For coastally dependent energy facilities, consider siting in alternative coastal locations. For non-coastally dependent energy facilities, consider siting in areas outside of the coastal zone. Weigh the environmental and safety impacts of locating proposed energy facilities at alternative sites.*

**The Project does not involve an energy facility; therefore, this policy does not apply.**

#### Energy Management Principle #1

*Encourage energy conservation and the use of alternative sources such as solar and wind power in order to assist in meeting the energy needs of the Commonwealth.*

**The Project does not involve an energy project associated with generation or an expansion in consumption.**

### **Ocean Resources**

#### Ocean Resources Policy #1

*Support the development of environmentally sustainable aquaculture, both for commercial and enhancement (public shellfish stocking) purposes. Ensure that the review process regulating aquaculture facility sites (and access routes to those areas) protects ecologically significant resources (salt marshes, dunes, beaches, barrier beaches, and salt ponds) and minimizes adverse impacts upon the coastal and marine environment.*

**The Project does not involve aquaculture; therefore, this policy does not apply.**

## Ocean Resources Policy #2

*Extraction of marine minerals will be considered in areas of state jurisdiction, except where prohibited by the Massachusetts Ocean Sanctuaries Act, where and when the protection of fisheries, air and marine water quality, marine resources, navigation, and recreation can be assured.*

The Project does not involve extracting marine minerals; therefore, this policy does not apply.

## Ocean Resources Policy #3

*Accommodate offshore sand and gravel mining needs in areas and in ways that will not adversely affect shoreline areas due to alteration of wave direction and dynamics, marine resources and navigation. Mining of sand and gravel, when and where permitted, will be primarily for the purpose of beach nourishment.*

The Project does not involve offshore mining or beach nourishment; therefore, this policy does not apply.

## **Growth Management**

### Growth Management Principle #1

*Encourage, through technical assistance and review of publicly funded development, compatibility of proposed development with local community character and scenic resources.*

As a publicly-funded project, this project will undergo review on local, state, and federal level, including review by the Cape Cod Commission. Projects elements will be reviewed for consistency with the Cape Cod Regional Policy Plan, (RPP) and local comprehensive plans and goals. The RPP contains goals for balancing the protection of the region's various cultural, natural, and other resources with promoting sustainable local and regional economies and economic growth.

### Growth Management Principle #2

*Ensure that state and federally funded transportation and wastewater projects primarily serve existing developed areas, assigning highest priority to projects that meet the needs of urban and community development centers.*

The Project is a transportation project for airfield improvements at an airport. It primarily takes place within previously developed areas and helps serve the existing users of the Airport.

### Growth Management Principle #3

*Encourage the revitalization and enhancement of existing development centers in the coastal zone through technical assistance and federal and state financial support for residential, commercial and industrial development.*

**This project does not involve changes to an existing development center in the coastal zone, therefore, this principle does not apply.**

B. Is the project located within an area subject to a Municipal Harbor Plan? \_\_\_\_ Yes   x    
No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:



## WATER SUPPLY SECTION

### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? \_\_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

### II. Impacts and Permits

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	
<u>Total</u>			
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? \_\_\_ Yes \_\_\_ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? \_\_\_ Yes \_\_\_ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results.

\_\_\_\_\_

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? \_\_\_\_\_ Will the project require an increase in that withdrawal? \_\_\_ Yes \_\_\_ No; if yes, then how much of an increase (gpd)? \_\_\_\_\_

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? \_\_\_ Yes \_\_\_ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Permitted</u>	<u>Existing</u>	<u>Avg</u>	<u>Project Flow</u>
<u>Total</u>				
	<u>Flow</u>	<u>Daily Flow</u>		
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve:

1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ☐ Yes ☐ No
2. a Watershed Protection Act variance? ☐ Yes ☐ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ☐ Yes ☐ No

### **III. Consistency**

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

## WASTEWATER SECTION

### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? \_\_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

### II. Impacts and Permits

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____
	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
<b>Total: Project Site Acreage</b>	_____	_____	_____

B. Is the existing collection system at or near its capacity? \_\_\_ Yes \_\_\_ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? \_\_\_ Yes \_\_\_ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? \_\_\_ Yes X No; if yes, describe as follows:

	<u>Permitted</u>	<u>Existing</u>	<u>Avg</u>	<u>Project Flow</u>
<u>Total</u>				
		<u>Daily Flow</u>		
Wastewater treatment plant capacity (in gallons per day)	_____	_____	_____	_____

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

*(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)*

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ☐ Yes  
☐ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ☐ Yes ☐ No; if yes, what is the capacity (tons per day):

	<u>Existing</u>	<u>Change</u>	
<u>Total</u>			
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

### III. Consistency

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ☐ Yes ☐ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

## TRANSPORTATION SECTION (TRAFFIC GENERATION)

### I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? \_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? \_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

### II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces			
Number of vehicle trips per day			
ITE Land Use Code(s):			

B. What is the estimated average daily traffic on roadways serving the site?

	<u>Roadway</u>	<u>Existing</u>	<u>Change</u>
<u>Total</u>			
1.			
2.			
3. _____			

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

E. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? \_\_ Yes \_\_ No; if yes, describe if and how the project will participate in the TMA:

F. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? \_\_\_\_ Yes \_\_ No; if yes, generally describe:

G. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

### **III. Consistency**

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

## **TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)**

### **I. Thresholds**

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))?   X   Yes    No; if yes, specify, in quantitative terms:

#### **Transportation:**

- 11.03(6)b(iii) Expansion of an existing runway at an airport
- 11.03(6)b(iv) Construction of a New taxiway at an airport

Runway extension to both ends of Runway 15-33. The Runway 15 end would be lengthened by 895 feet and the Runway 33 end would be lengthened by 400. New taxiway segments and new locations for existing taxiways: Taxiway A will be extended, Taxiway D will be reconfigured to a partial parallel taxiway at a standard 400-foot separation east of Runway 15-33, Taxiway B will be moved to a standard 400-foot separation south of Runway 6-24 and extended north.

B. Does the project require any state permits related to **roadways or other transportation facilities**?    Yes   X   No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

### **II. Transportation Facility Impacts**

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site: The infrastructure enhancements support the safety and efficiency of the Cape Cod Gateway Airport. Please refer to Land Section III (Consistency) B(4) for a description of transportation facilities in the vicinity of the project site.

B. Will the project involve any

- |  |                                |
|--|--------------------------------|
| 1. Alteration of bank or terrain (in linear feet)? | <u>          tbd          </u> |
| 2. Cutting of living public shade trees (number)?  | <u>          tbd          </u> |
| 3. Elimination of stone wall (in linear feet)?     | <u>          n/a          </u> |

**III. Consistency --** Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

The Proposed Project is consistent with the Cape Cod 2020 Regional Transportation Plan (2020-2040) by strengthening the infrastructure, enhancing safety, and meeting the "capacity of Cape Cod's airports in accommodating air traffic... to solve existing air traffic congestion or prevent future congestion."

## **ENERGY SECTION**

### **I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? \_\_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

### **II. Impacts and Permits**

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are:

1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? \_\_\_Yes \_\_\_No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

### **III. Consistency**

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:



## AIR QUALITY SECTION

### I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? \_\_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

### II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? \_\_\_ Yes \_\_\_ No; if yes, describe existing and proposed emissions (in tons per day) of:

<u>Total</u>	<u>Existing</u>	<u>Change</u>	
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

### III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

## **SOLID AND HAZARDOUS WASTE SECTION**

### **I. Thresholds / Permits**

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? \_\_\_ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? \_\_\_ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

### **II. Impacts and Permits**

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? \_\_\_ Yes \_\_\_ No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? \_\_\_ Yes \_\_\_ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos?

\_\_\_ Yes \_\_\_ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

### **III. Consistency**

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

## **HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION**

### **I. Thresholds / Impacts**

A. Have you consulted with the Massachusetts Historical Commission? ☐ Yes ☒ No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? N/A Yes ☐ No; if yes, attach correspondence.

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ☐ Yes ☒ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ☐ Yes ☐ No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ☒ Yes ☐ No; if yes, does the project involve the destruction of all or any part of such archaeological site? ☒ Yes ☐ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

### **II. Impacts**

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

Archaeological sites 19-BN-827, 19-BN-828 and 19-BN-829 are within the Airport Property. No work is proposed at these archaeological site locations. Site 19-BR-74, an Indian Trail, crosses north-south through the Airport property. Work areas in the vicinity of the former Indian Trail (19-BR-74) have previous heavy impacts related to the construction of the airfield and runways. No impact to the archaeological sites is anticipated.

### **III. Consistency**

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

Massachusetts Historical Commission review will commence with submittal of a Environmental Notification Form.

## **CLIMATE CHANGE ADAPTATION AND RESILIENCY SECTION**

This section of the Environmental Notification Form (ENF) solicits information and disclosures related to climate change adaptation and resiliency, in accordance with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency (the “MEPA Interim Protocol”), effective October 1, 2021. The Interim Protocol builds on the analysis and recommendations of the 2018 Massachusetts Integrated State Hazard Mitigation and Climate Adaptation Plan (SHMCAP) and incorporates the efforts of the Resilient Massachusetts Action Team (RMAT), the inter-agency steering committee responsible for implementation, monitoring, and maintenance of the SHMCAP, including the “Climate Resilience Design Standards and Guidelines” project. The RMAT team recently released the RMAT Climate Resilience Design Standards Tool, which is available [here](#).

The MEPA Interim Protocol is intended to gather project-level data in a standardized manner that will both inform the MEPA review process and assist the RMAT team in evaluating the accuracy and effectiveness of the RMAT Climate Resilience Design Standards Tool. Once this testing process is completed, the MEPA Office anticipates developing a formal Climate Change Adaptation and Resiliency Policy through a public stakeholder process. Questions about the RMAT Climate Resilience Design Standards Tool can be directed to [rmat@mass.gov](mailto:rmat@mass.gov).

**All Proponents must complete the following section, referencing as appropriate the results of the output report generated by the RMAT Climate Resilience Design Standards Tool and attached to the ENF.** In completing this section, Proponents are encouraged, but not required at this time, to utilize the recommended design standards and associated Tier 1/2/3 methodologies outlined in the RMAT Climate Resilience Design Standards Tool to analyze the project design. However, Proponents are requested to respond to a respond to a [user feedback survey](#) on the RMAT website or to provide feedback to [rmat@mass.gov](mailto:rmat@mass.gov), which will be used by the RMAT team to further refine the tool. Proponents are also encouraged to consult general guidance and best practices as described in the [RMAT Climate Resilience Design Guidelines](#).

### [Refer to RMAT Report in Attachment D](#)

#### **Climate Change Adaptation and Resiliency Strategies**

- I. Has the project taken measures to adapt to climate change for all of the climate parameters analyzed in the RMAT Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat)? X  
Yes                      \_\_\_ No

*Note: Climate adaptation and resiliency strategies include actions that seek to reduce vulnerability to anticipated climate risks and improve resiliency for future climate conditions. Examples of climate adaptation and resiliency strategies include flood barriers, increased stormwater infiltration, living shorelines, elevated infrastructure, increased tree canopy, etc. Projects should address any planning priorities identified by the affected municipality through the Municipal Vulnerability Preparedness (MVP) program or other planning efforts, and should consider a flexible adaptive pathways approach, an adaptation best practice that encourages design strategies that adapt over time to respond to changing climate conditions. General guidance and best practices for designing for climate risk are described in the [RMAT Climate Resilience Design Guidelines](#).*

A. If no, explain why.

B. If yes, describe the measures the project will take, including identifying the planning horizon and climate data used in designing project components. If applicable, specify the return period and design storm used (e.g., 100-year, 24-hour storm).

The Cape Cod Gateway Airport's recent measures for adaptation and resiliency include projects that are in alignment with the Town's Energy Reduction Plan (ERP) and green vehicle procurement policy such as:

- 2015 development of a 7 megawatt 20-acre solar array;
- 2015 airport upgrade of street and parking lot lights to LED using Cape Light Compact's lighting program;
- Upgrade of leased facility lighting to LED using Cape Light Compact's lighting program for Cape Air and Ross Aviation facilities – a 75% savings of energy used for lighting;
- Execution of a 0.5 megawatt rooftop solar array system in coordination with Cape Air on two existing aircraft hangars owned by the airport making Cape Air, a net zero electricity user in Barnstable and saving over \$1 million between 2010 and 2020;
- Installation of 8 electric vehicle (EV) charging stations using Massachusetts' charging station program with 8 more on the way;
- 2020 procurement of propane and battery operated-solar powered airfield mowers through the Massachusetts Department of Transportation – Aeronautics Division (MassDOT) Leading by Example Greenhouse Gas Reduction Initiative; and 2021 procurement of a hybrid airport operations vehicle.

Cape Cod Gateway Airport is responsive to the environment and has developed green building standards for tenants planning new structures or improvements to existing structures. Building proponents need to identify how projects include energy saving construction methods, materials, and equipment, and also renewable energy production such as solar arrays into their designs.

The 2020 Airport Master Plan builds on these adaptation and resiliency accomplishments with the following initiatives:

Green opportunities the Airport are actively considering include:

- Installing electric aircraft charging stations
- Installing electric vehicle charging stations
- Installing solar panels on vehicle awnings and hangars

Electric aircraft opportunities continue to evolve. The Airport is reserving space on either side of the Terminal building to plan for electric aircraft charging for both GA and commercial aircraft. As the technology continues to advance, more details will be planned for in terms of electrical access and charging options for aircraft, including if charging will occur via truck or inground connectivity.

Adaptation and resiliency practices employed by the Airport include the following:

- Implementation of a designated aircraft deicing and washing facility
- Use of an Ecologic Cart system to prevent the discharge of firefighting foam onto the ground surface during annual, federally required, testing of the foam
- Regular inspections to inventory hazardous materials
- Continued ban on pesticides, road salt, and deicing chemicals

C. Is the project contributing to regional adaptation strategies? ☒ Yes \_\_\_ No; If yes, describe.

Please refer to the response in question I.B.

II. Has the Proponent considered alternative locations for the project in light of climate change risks?

\_\_\_ Yes ☒ No

A. If no, explain why.

Is not feasible to relocate the Airport and its infrastructure.

B. If yes, describe alternatives considered.

III. Is the project located in Land Subject to Coastal Storm Flowage (LSCSF) or Bordering Land Subject to Flooding (BLSF) as defined in the Wetlands Protection Act? \_\_\_ Yes ☒ No

If yes, describe how/whether proposed changes to the site's topography (including the addition of fill) will result in changes to floodwater flow paths and/or velocities that could impact adjacent properties or the functioning of the floodplain. General guidance on providing this analysis can be found in the CZM/MassDEP Coastal Wetlands Manual, available [here](#).

## ENVIRONMENTAL JUSTICE SECTION

### I. Identifying Characteristics of EJ Populations

A. If an Environmental Justice (EJ) population has been identified as located in whole or in part within 5 miles of the project site, describe the characteristics of each EJ populations as identified in the EJ Maps Viewer (i.e., the census block group identification number and EJ characteristics of “Minority,” “Minority and Income,” etc.). Provide a breakdown of those EJ populations within 1 mile of the project site, and those within 5 miles of the site.

The Proponent identified seven Environmental Justice (EJ) Populations within one mile of the Project sites.

Block Group	Census Tract	County	Town	Criteria	Total Minority Population	Households with Language Isolation	Median Household Income
4	126.02	Barnstable	Barnstable	Minority	49.4%	8.8%	\$52,757 (62.5% of the MA median)
4	121.02	Barnstable	Yarmouth	Minority	33.7%	0%	\$62,438 (74% of the MA median)
3	126.02	Barnstable	Barnstable	Minority	50.1%	4.6%	\$58,631 (69.5% of the MA median)
3	153	Barnstable	Barnstable	Minority and Income	53.5%	15%	\$54,000 (64% of the MA median)
2	121.01	Barnstable	Yarmouth	Minority	30.9%	0%	\$98,664 (116.9% of the MA median)
2	126.02	Barnstable	Barnstable	Minority and Income	58.5%	35.2%	\$51,214 (60.7% of the MA median)
2	153	Barnstable	Barnstable	Minority and Income	42.1%	11.5%	\$26,339 (31.2% of the MA median)
1	126.01	Barnstable	Barnstable	Minority	33.8%	15.5%	\$60,919 (72.2% of the MA median)

The Proponent identified eight Environmental Justice (EJ) Populations within 5 miles of the Project sites.

Block Group	Census Tract	County	Town	Criteria	Total Minority Population	Households with Language Isolation	Median Household Income
1	120.02	Barnstable	Yarmouth	Income	26.8%	7.7%	\$55,880 (66.2% of the MA median)
3	121.02	Barnstable	Yarmouth	Income	9.6%	0%	\$53,750 (62.6% of the MA median)
1	121.02	Barnstable	Yarmouth	Income	23.9%	2.7%	\$39,141 (46.4% of the MA median)
2	126.01	Barnstable	Barnstable	Minority	35.4%	2.5%	\$82,344 (97.6% of the MA median)
1	126.02	Barnstable	Barnstable	Minority and Income	46.6%	0%	\$38,125 (45.2% of the MA median)
3	125.02	Barnstable	Barnstable	Minority and English Isolation	34.3%	25.5%	\$64,286 (76.2% of the MA median)
4	125.02	Barnstable	Barnstable	Minority	47.5%	10.4%	\$70,170 (83.2% of the MA median)
2	12.02	Barnstable	Barnstable	Minority and Income	39.7%	1.6%	\$35,023 (41.5% of the MA median)
4	121.01	Barnstable	Yarmouth	Minority	32.2%	0%	\$56,101 (66.5% of the MA median)

B. Identify all languages identified in the “Languages Spoken in Massachusetts” tab of the EJ Maps Viewer as spoken by 5 percent or more of the EJ population who also identify as not speaking English “very well.” The languages should be identified for each census tract located in whole or in part within 1 mile and 5 miles of the project site, regardless of whether such census tract contains any designated EJ populations.

Using the EJ Maps Viewer that identifies “Languages Spoken in Massachusetts”, the Proponent found that there are eight tracts with 5% or more of the population who do not speak English very well within five miles of the Project sites. These populations speak the following language:

- Portuguese or Portuguese Creole
- Spanish or Spanish Creole

C. If the list of languages identified under Section I.B. has been modified with approval of the EEA EJ Director, provide a list of approved languages that the project will use to provide public involvement opportunities during the course of MEPA review. If the list has been expanded by the Proponent (without input from the EEA EJ Director), provide a list of the additional languages that will be used to provide public involvement opportunities during the course of MEPA review as required by Part II of the MEPA Public Involvement Protocol for Environmental Justice Populations (“MEPA EJ Public Involvement Protocol”). If the project is exempt from Part II of the protocol, please specify.



## II. Potential Effects on EJ Populations

A. If an EJ population has been identified using the EJ Maps Viewer within 1 mile of the project site, describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

The Project is anticipated to result in temporary air quality and noise impacts due to construction activities. All impacts will be reviewed through MEPA and the various permitting programs and will be appropriately mitigated in accordance with applicable regulations. No long-term disproportionate environmental and public health impacts on EJ populations are anticipated as a result of the Project.

B. If an EJ population has been identified using the EJ Maps Viewer within 5 miles of the project site, will the project: (i) meet or exceed MEPA review thresholds under 301 CMR 11.03(8)(a)-(b) \_\_\_ Yes ☒ No; or (ii) generate 150 or more new average daily trips (adt) of diesel vehicle traffic, excluding public transit trips, over a duration of 1 year or more. \_\_\_ Yes ☒ No

C. If you answered "Yes" to either question in Section II.B., describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

## III. Public Involvement Activities

A. Provide a description of activities conducted prior to filing to promote public involvement by EJ populations, in accordance with Part II of the MEPA EJ Public Involvement Protocol. In particular:

1. If advance notification was provided under Part II.A., attach a copy of the Environmental Justice Screening Form and provide list of CBOs/tribes contacted (with dates). Copies of email correspondence can be attached in lieu of a separate list.

An advanced notification of the Project was sent out to CBOs on 10/12/2022.

See Attachment F for EJ Screening Form and distribution list.

2. State how CBOs and tribes were informed of ways to request a community meeting, and if any meeting was requested. If public meetings were held, describe any issues of concern that were raised at such meetings, and any steps taken (including modifications to the project design) to address such concerns.

A community meeting was held on October 27, 2022 in person at the airport to present proposed projects. The meeting included translation services and opportunities for question and answer.

3. If the project is exempt from Part II of the protocol, please specify.

B. Provide below (or attach) a distribution list (if different from the list in Section III.A. above) of CBOs and tribes, or other individuals or entities the Proponent intends to maintain for the notice of the MEPA Site Visit and circulation of other materials and notices during the course of MEPA review.

See Attachment F for distribution list.

C. Describe (or submit as a separate document) the Proponent's plan to maintain the same level of community engagement throughout the MEPA review process, as conducted prior to filing.

The Proponent intends to continue outreach to EJ communities through e-mail to CBOs and others listed on the EJ Distribution List (see Attachment F) as well others who express interest in the Projects' development process. The Airport's consultant team includes community engagement specialists that will continue to provide outreach to EJ communities and neighboring communities using the following methods: postcard mailings, a dedicated website for updates and documents related to the Projects <https://flyhya.com/environmental-assessment> several in-person community meetings (in addition to regulatory meetings), and pop-up information events in the community (e.g., at the library). The public will have opportunities to formally pose questions or comments on the Projects through the MEPA/NEPA/Cape Cod commission review processes and during their respective public comment periods.

The EJ distribution list along with interested community members will be notified in advance, via email, of any planned public meetings associated with the Projects' review processes. Notices regarding public meetings related to the Projects will also be published in the local newspaper and noticed on the Projects' website. Per the EJ MEPA requirements, all materials will be translated to Portuguese. A translator will be provided at community meetings upon request.

All communication and ads will clearly indicate the Proponent's contact information to allow concerned citizens to be able to discuss the Projects and ask questions.

## CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

(Name) Cape Cod Times Date) 11/29/2022

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

*Katie R. Servis*

*Alyssa Jacobs*

November 30, 2022

November 30, 2022

Date Signature of Responsible Officer  
or Proponent

Date Signature of person preparing  
ENF (if different from above)

Katie Servis

Alyssa Jacobs

Name (print or type)

Name (print or type)

Cape Cod Gateway Airport

Epsilon Associates

Firm/Agency

Firm/Agency

480 Barnstable Rd.

3 Mill & Main Place, Suite 250

Street

Street

Hyannis, MA 02601

Maynard, MA, 01754

Municipality/State/Zip

Municipality/State/Zip

508-775-2020

978-897-7100

Phone

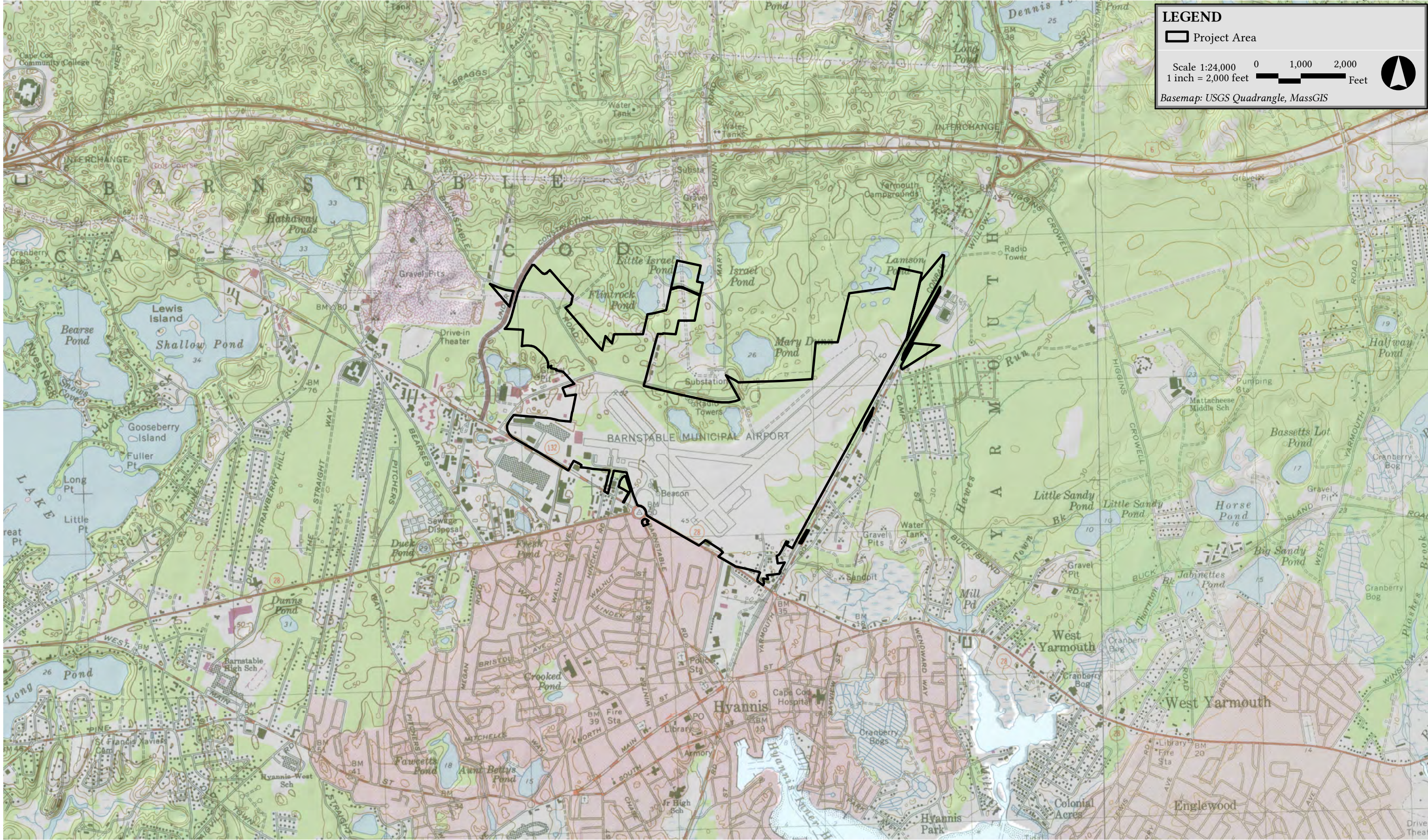
Phone

## **Attachment A**

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### Project Figures

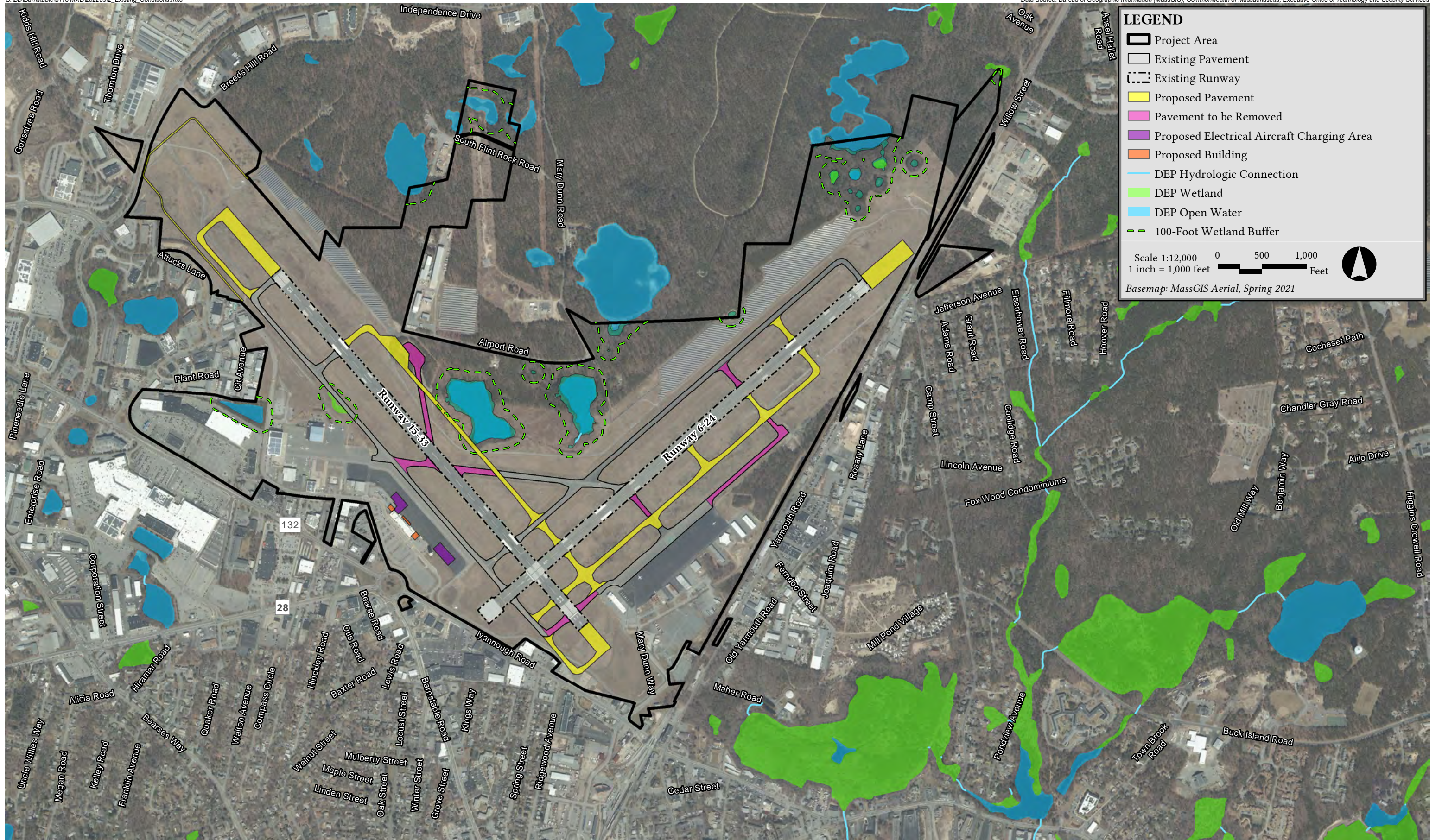




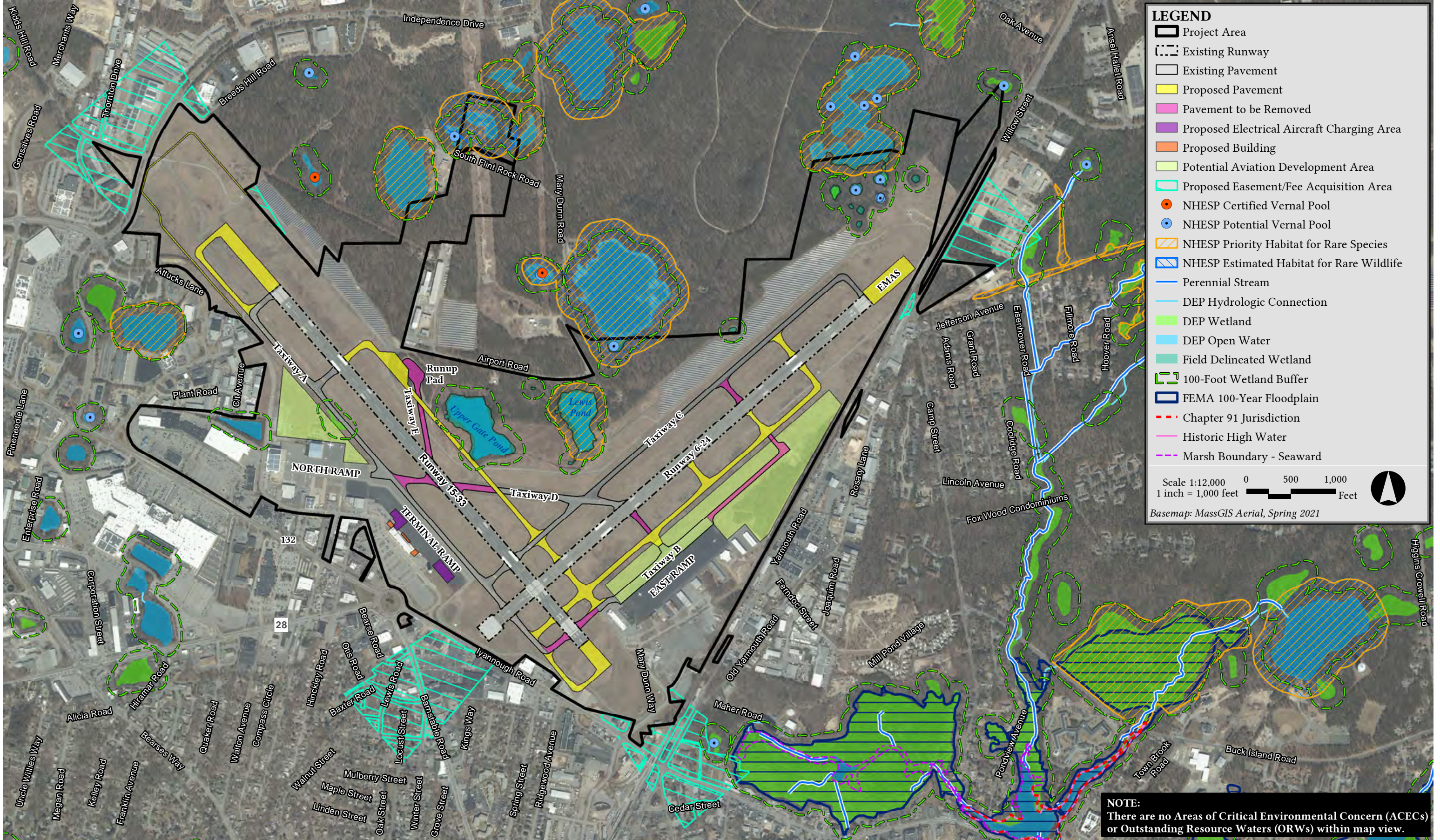
Cape Cod Gateway Airport Barnstable, Massachusetts

Figure 1  
USGS Locus Map

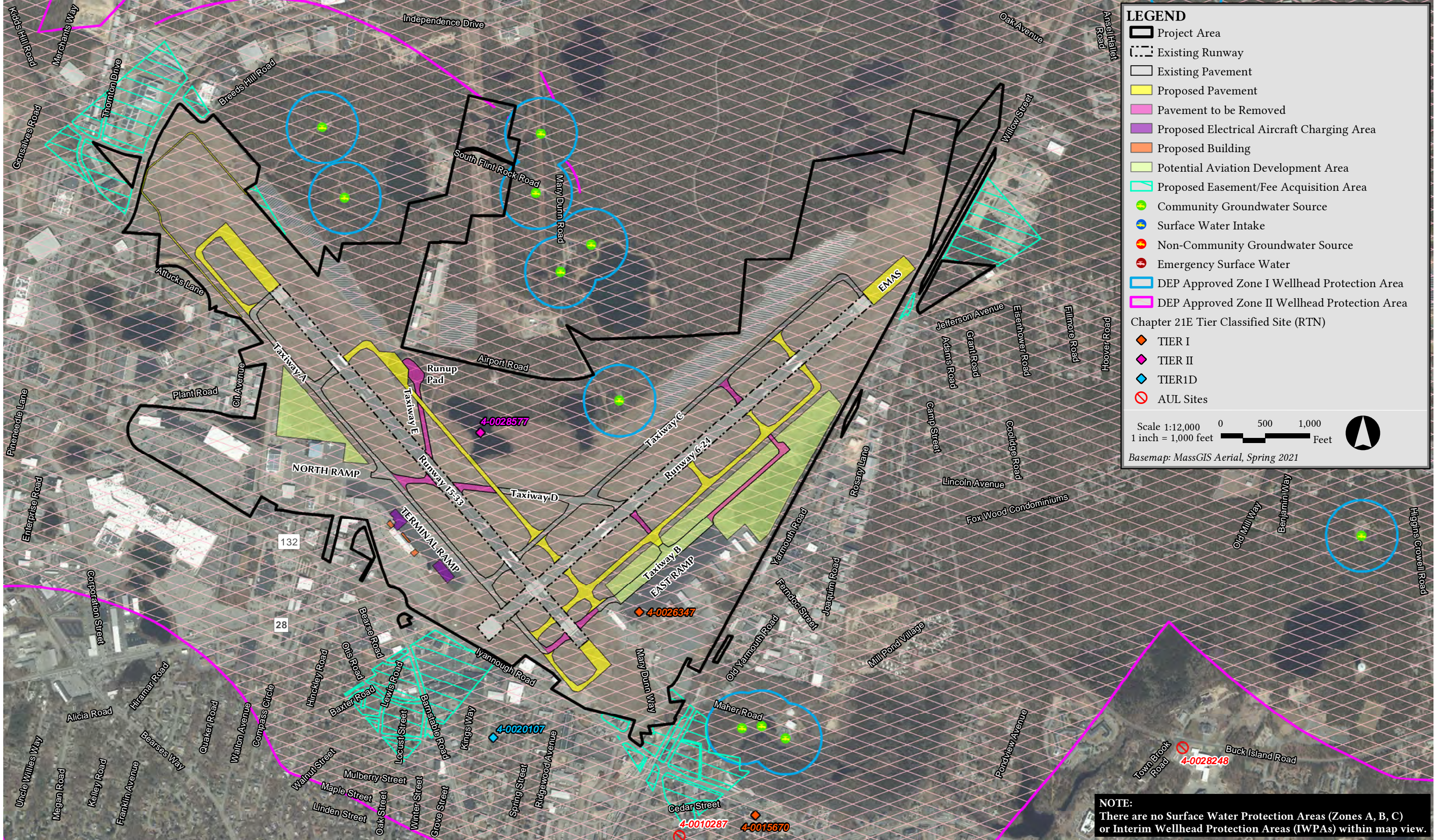










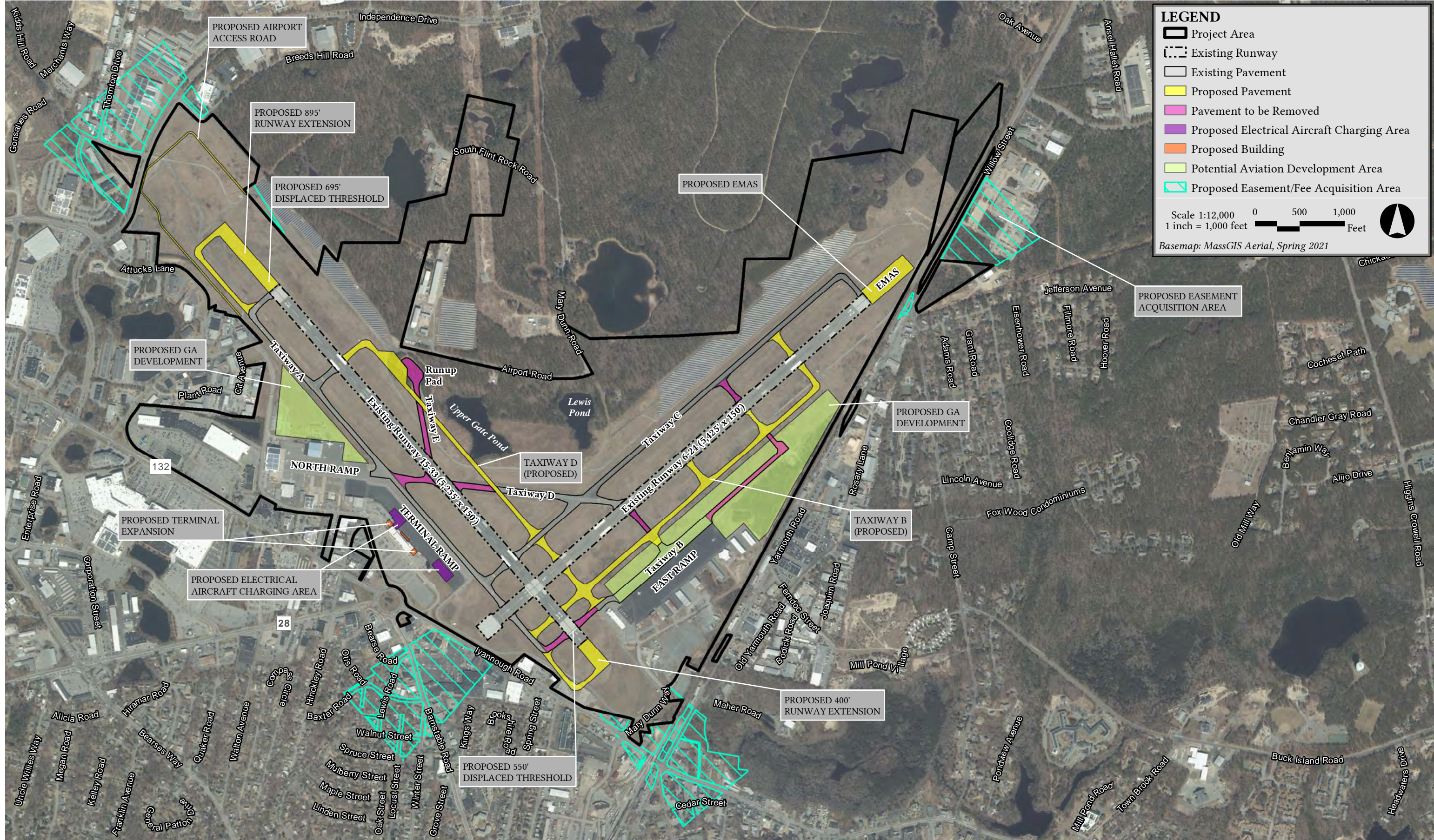






**Figure 3-3**  
*Environmental Constraints: Historic Resources and Article 97 Lands*







## **Attachment B**

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Circulation List

## ATTACHMENT B CIRCULATION LIST

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Bethany A. Card, Secretary  
Executive Office of Energy and  
Environmental Affairs  
Attn: MEPA Office  
100 Cambridge St., Suite 900  
Boston, MA 02114  
[MEPA@mass.gov](mailto:MEPA@mass.gov)

Department of Environmental Protection  
Commissioner's Office  
One Winter Street  
Boston, MA 02108  
[helena.boccadoro@mass.gov](mailto:helena.boccadoro@mass.gov)

Department of Environmental Protection  
Southeast Regional Office – Lakeville  
Attn: MEPA Coordinator  
20 Riverside Drive,  
Lakeville, MA 02347  
[george.zoto@mass.gov](mailto:george.zoto@mass.gov)  
[jonathan.hobill@mass.gov](mailto:jonathan.hobill@mass.gov)

Massachusetts Department of Transportation  
Public/Private Development Unit  
10 Park Plaza, Suite #4150  
Boston, MA 02116  
[MassDOTPPDU@dot.state.ma.us](mailto:MassDOTPPDU@dot.state.ma.us)

Massachusetts Department of Transportation,  
District #5  
Attn: MEPA Coordinator  
1000 County Street  
Taunton, MA 02780  
[barbara.lachance@dot.state.ma.us](mailto:barbara.lachance@dot.state.ma.us)

The Massachusetts Historical Commission  
The MA Archives Building  
220 Morrissey Boulevard  
Boston, MA 02125

MEPA Office  
Attn: EEA EJ Director  
100 Cambridge Street, Suite 900  
Boston, MA 02144  
[MEPA-EJ@mass.gov](mailto:MEPA-EJ@mass.gov)

Department of Energy Resources  
Attn: MEPA Coordinator  
100 Cambridge Street, 10th floor  
Boston, MA 02114  
[paul.ormond@mass.gov](mailto:paul.ormond@mass.gov)  
[brendan.place@mass.gov](mailto:brendan.place@mass.gov)

Cape Cod Commission (CCC)  
P.O. Box 226  
3225 Main St.  
Barnstable, MA 02630  
[kseiatori@capecodcommission.org](mailto:kseiatori@capecodcommission.org)  
[regulatory@capecodcommission.org](mailto:regulatory@capecodcommission.org)

Barnstable Town Council  
Cynthia A. Lovell, Administrator  
367 Main Street  
Hyannis, MA, 02601  
[cynthia.lovell@town.barnstable.ma.us](mailto:cynthia.lovell@town.barnstable.ma.us)

Barnstable Planning Board  
Elizabeth Jenkins, AICP, Director,  
Planning & Development  
367 Main Street  
Hyannis, MA, 02601  
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Barnstable Conservation Commission  
Darcy Karle, Conservation Administrator  
367 Main Street  
Hyannis, MA, 02601  
Darcy.Karle@town.barnstable.ma.us

Barnstable Board of Health  
Thomas A. McKean, Director  
200 Main Street  
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thomas.mckean@town.barnstable.ma.us

Hyannis Public Library  
Antonia Stephens, Library Director  
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Robert L. Whritenour, Town Administrator  
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1146 Route 28  
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Kathy Williams, Town Planner  
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South Yarmouth, MA 02664  
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Brittany DiRienzo, Conservation  
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[bdirienzo@yarmouth.ma.us](mailto:bdirienzo@yarmouth.ma.us)

Bruce G. Murphy, Health Director, R.S., MPH,  
CHO  
Yarmouth Town Hall  
1146 Route 28  
South Yarmouth, MA 02664  
[bmurphy@yarmouth.ma.us](mailto:bmurphy@yarmouth.ma.us)

Yarmouth Public Library  
Jane Cain, Director  
312 Old Main Street  
South Yarmouth, MA 02664  
[jcain@yarmouth.ma.us](mailto:jcain@yarmouth.ma.us)



## **Attachment C**

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### List of Federal, State, and Local Permits

## ATTACHMENT C LIST OF FEDERAL, STATE, AND LOCAL PERMITS

Agency Name	Permit or Action
<b><i>Federal</i></b>	
Army Corps of Engineers	Section 404 General Permit (Pre-Construction Notification)
Environmental Protection Agency	Coverage under National Pollutant Discharge Elimination System (NPDES) Construction Activities Permit
FAA, U.S. Army Corps of Engineers; Tribal Consultation; State Historic Preservation Officer (SHPO)	Review under Section 106 of the National Historic Preservation Act (36 CFR 800)
Federal Aviation Administration (FAA)	Federal Aviation Administration (FAA) planning, design, and safety Standards: AC 150/5300-13A Airport Design
Department of Interior, U.S. Fish and Wildlife Service (USFWS)	Section 7 Consultation under U.S. Endangered Species Act
<b><i>State</i></b>	
Massachusetts Environmental Policy Act Office ("MEPA")	MEPA Certificate
Massachusetts Department of Environment (MassDEP)	401 Water Quality Certification
MA Department of Environmental Protection (MassDEP)	Wetlands Protection Act M.G.L. c. 131 § 40 Variance
Massachusetts Historical Commission (MHC)	State Historic Register Review (Chapter 256)
<b><i>Town of Barnstable</i></b>	
Barnstable Conservation Commission	Local Wetlands Ordinance Chapter 237



## **Attachment D**

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RMAT Tool



# Climate Resilience Design Standards Tool Project Report

## Cape Cod Gateway Master Plan Update

Date Created: 6/1/2022 3:40:46 PM

Created By:

rdibenedetto@epsilonassociates.com

Date Report Generated: 9/27/2022 10:26:19 AM

Tool Version: Version 1.2

Project Contact Information: Katie Servis ([kservis@flyhya.com](mailto:kservis@flyhya.com))

## Project Summary

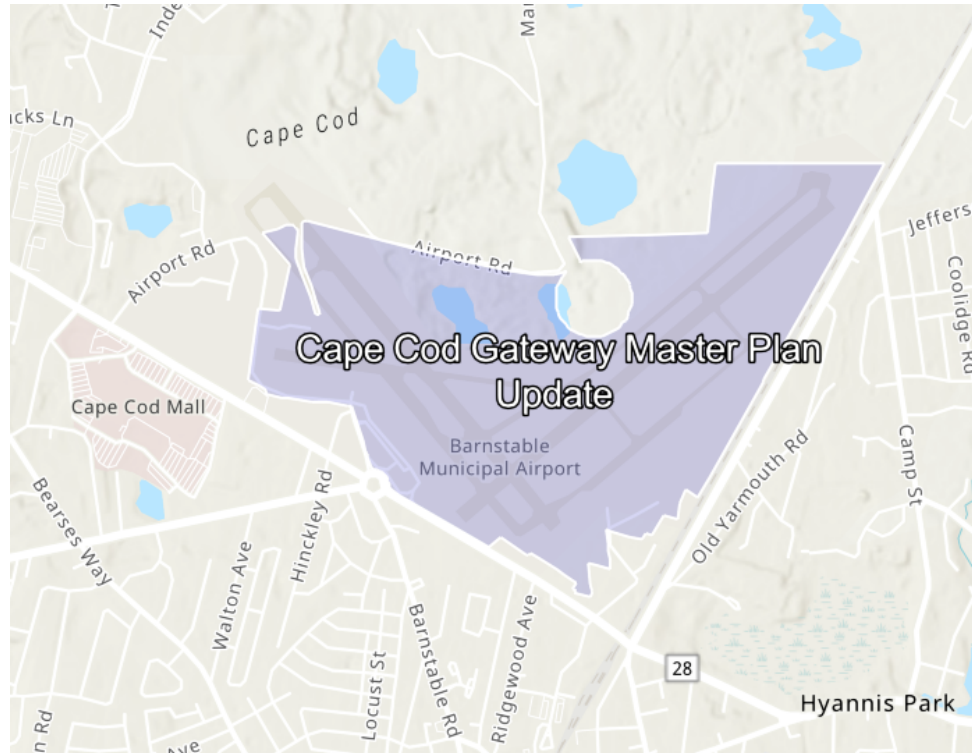
[Link to Project](#)

Estimated Capital Cost: \$111000000.00

End of Useful Life Year: 2092

Project within mapped Environmental Justice neighborhood: No

Ecosystem Service	Scores
<b>Benefits</b>	
Project Score	High
<b>Exposure</b>	
Sea Level Rise/Storm Surge	Not Exposed
Extreme Precipitation - Urban Flooding	High Exposure
Extreme Precipitation - Riverine Flooding	High Exposure
Extreme Heat	High Exposure



## Asset Preliminary Climate Risk Rating

Number of Assets: 4

### Summary

Asset Risk	Sea Level Rise/Storm Surge	Extreme Precipitation - Urban Flooding	Extreme Precipitation - Riverine Flooding	Extreme Heat
Terminal Building	Low Risk	High Risk	High Risk	High Risk
Runways and Taxiways	Low Risk	High Risk	High Risk	High Risk
Hangar Development Areas	Low Risk	High Risk	High Risk	High Risk

Forested Area — Natural Resource project assets do not receive a preliminary climate risk rating. —

## Climate Resilience Design Standards Summary

	Target Planning Horizon	Intermediate Planning Horizon	Percentile	Return Period	Tier
<b>Sea Level Rise/Storm Surge</b>					
Terminal Building					
Runways and Taxiways					
Hangar Development Areas					
Forested Area					
<b>Extreme Precipitation</b>					
Terminal Building	2070			100-yr (1%)	Tier 3
Runways and Taxiways	2050			10-yr (10%)	Tier 2

Hangar Development Areas	2070	25-yr (4%)	Tier 2
Forested Area	2030		Tier 1
<b>Extreme Heat</b>			
Terminal Building	2070	90th	Tier 3
Runways and Taxiways	2050	50th	Tier 2
Hangar Development Areas	2070	50th	Tier 2
Forested Area	2030	50th	Tier 1

## Scoring Rationale - Project Exposure Score

The purpose of the Exposure Score output is to provide a preliminary assessment of whether the overall project site and subsequent assets are exposed to impacts of natural hazard events and/or future impacts of climate change. For each climate parameter, the Tool will calculate one of the following exposure ratings: Not Exposed, Low Exposure, Moderate Exposure, or High Exposure. The rationale behind the exposure rating is provided below.

### Sea Level Rise/Storm Surge

This project received a "Not Exposed" because of the following:

- Not located within the predicted mean high water shoreline by 2030
- No historic coastal flooding at project site
- Not located within the Massachusetts Coast Flood Risk Model (MC-FRM)

### Extreme Precipitation - Urban Flooding

This project received a "High Exposure" because of the following:

- Increased impervious area
- Maximum annual daily rainfall exceeds 10 inches within the overall project's useful life
- No historic flooding at project site
- Existing impervious area of the project site is between 10% and 50%

### Extreme Precipitation - Riverine Flooding

This project received a "High Exposure" because of the following:

- Part of the project is within a mapped FEMA floodplain, outside of the Massachusetts Coast Flood Risk Model (MC-FRM)
- Part of the project is within 100ft of a waterbody
- Project is potentially susceptible to riverine erosion
- No historic riverine flooding at project site

### Extreme Heat

This project received a "High Exposure" because of the following:

- Increased impervious area
- Existing trees are being removed as part of the proposed project
- Existing impervious area of the project site is between 10% and 50%
- 10 to 30 day increase in days over 90 deg. F within project's useful life
- Located within 100 ft of existing water body

## Scoring Rationale - Asset Preliminary Climate Risk Rating

A Preliminary Climate Risk Rating is determined for each infrastructure and building asset by considering the overall project Exposure Score and responses to Step 4 questions provided by the user in the Tool. Natural Resource assets do not receive a risk rating. The following factors are what influenced the risk ratings for each asset.

### Asset - Terminal Building

Primary asset criticality factors influencing risk ratings for this asset:

- Asset may inaccessible/inoperable during natural hazard event, but must be accessible/operable within one day after natural hazard event
- Greater than 10,000 people would be directly affected by the loss/inoperability of the asset

- Some alternative programs and/or services are available to support the community
- Cost to replace is between \$30 million and \$100 million
- Spills and/or releases of hazardous materials would be relatively easy to clean up

#### **Asset - Runways and Taxiways**

Primary asset criticality factors influencing risk ratings for this asset:

- Asset can be inaccessible/inoperable more than a week after natural hazard event without consequences
- Loss/inoperability of the asset would have impacts limited to the location of infrastructure only
- Inoperability of the asset would be expected to cause a loss of confidence in government agency
- Inoperability may moderately impact other facilities, assets, or buildings, but is not expected to affect their ability to operate
- There are no hazardous materials in the asset

#### **Asset - Hangar Development Areas**

Primary asset criticality factors influencing risk ratings for this asset:

- Asset may inaccessible/inoperable for more than a day but less than a week after natural hazard event
- Loss/inoperability of the asset would have impacts limited to local area and/or municipality
- Inoperability of the asset would not be expected to result in injuries
- Inoperability is likely to significantly impact other facilities, assets, or buildings and will likely affect their ability to operate
- There are no hazardous materials in the asset

#### **Asset - Forested Area**

Primary asset criticality factors influencing risk ratings for this asset:

No score available

## Project Climate Resilience Design Standards Output

Climate Resilience Design Standards and Guidance are recommended for each asset and climate parameter. The Design Standards for each climate parameter include the following: recommended planning horizon (target and/or intermediate), recommended return period (Sea Level Rise/Storm Surge and Precipitation) or percentile (Heat), and a list of applicable design criteria that are likely to be affected by climate change. Some design criteria have numerical values associated with the recommended return period and planning horizon, while others have tiered methodologies with step-by-step instructions on how to estimate design values given the other recommended design standards.

Asset: Terminal Building

Building/Facility

### Sea Level Rise/Storm Surge

Low Risk

#### Applicable Design Criteria

**Projected Tidal Datums:** NOT APPLICABLE

**Projected Water Surface Elevation:** NOT APPLICABLE

**Projected Wave Action Water Elevation:** NOT APPLICABLE

**Projected Wave Heights:** NOT APPLICABLE

**Projected Duration of Flooding:** NOT APPLICABLE

**Projected Design Flood Velocity:** NOT APPLICABLE

**Projected Scour & Erosion:** NOT APPLICABLE

### Extreme Precipitation

High Risk

Target Planning Horizon: 2070

Return Period: 100-yr (1%)

**LIMITATIONS:** The recommended Standards for Total Precipitation Depth & Peak Intensity are determined by the user drawn polygon and relationships as defined in the Supporting Documents. The projected Total Precipitation Depth values provided through the Tool are based on the climate projections developed by Cornell University as part of EEA's Massachusetts Climate and Hydrologic Risk Project, GIS-based data as of 10/15/21. For additional information on the methodology of these precipitation outputs, see Supporting Documents.

While Total Precipitation Depth & Peak Intensity for 24-hour Design Storms are useful to inform planning and design, it is recommended to also consider additional longer- and shorter-duration precipitation events and intensities in accordance with best practices. Longer-duration, lower-intensity storms allow time for infiltration and reduce the load on infrastructure over the duration of the storm. Shorter-duration, higher-intensity storms often have higher runoff volumes because the water does not have enough time to infiltrate infrastructure systems (e.g., catch basins) and may overflow or back up during such storms, resulting in flooding. In the Northeast, short-duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. While the Tool does not provide recommended design standards for these scenarios, users should still consider both short- and long-duration precipitation events and how they may impact the asset.

The projected values, standards, and guidance provided within this Tool may be used to inform plans and designs, but they do not provide guarantees for future conditions or resilience. The projected values are not to be considered final or appropriate for construction documents without supporting engineering analyses. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence

#### Applicable Design Criteria

**Tiered Methodology:** Tier 3

**Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms:** APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Terminal Building	2070	100-Year (1%)	9.7	<a href="#">Downloadable Methodology PDF</a>

**Projected Riverine Peak Discharge & Peak Flood Elevation:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 3

## Extreme Heat

High Risk

Target Planning Horizon: 2070  
Percentile: 90th Percentile

### Applicable Design Criteria

**Tiered Methodology:** Tier 3

**Projected Annual/Summer/Winter Average Temperatures:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 3

**Projected Heat Index:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 3

**Projected Growing Degree Days:** NOT APPLICABLE

**Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 3

**Projected Number of Heat Waves Per Year & Average Heat Wave Duration:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 3

**Projected Cooling Degree Days & Heating Degree Days (base = 65°F):** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 3

Asset: Runways and Taxiways

Infrastructure

## Sea Level Rise/Storm Surge

Low Risk

### Applicable Design Criteria

**Projected Tidal Datums:** NOT APPLICABLE

**Projected Water Surface Elevation:** NOT APPLICABLE

**Projected Wave Action Water Elevation:** NOT APPLICABLE

**Projected Wave Heights:** NOT APPLICABLE

**Projected Duration of Flooding:** NOT APPLICABLE

**Projected Design Flood Velocity:** NOT APPLICABLE

**Projected Scour & Erosion:** NOT APPLICABLE

## Extreme Precipitation

High Risk

Target Planning Horizon: 2050  
Return Period: 10-yr (10%)

**LIMITATIONS:** The recommended Standards for Total Precipitation Depth & Peak Intensity are determined by the user drawn polygon and relationships as defined in the Supporting Documents. The projected Total Precipitation Depth values provided through the Tool are based on the climate projections developed by Cornell University as part of EEA's Massachusetts Climate and Hydrologic Risk Project, GIS-based data as of 10/15/21. For additional information on the methodology of these precipitation outputs, see Supporting Documents.

While Total Precipitation Depth & Peak Intensity for 24-hour Design Storms are useful to inform planning and design, it is recommended to also consider additional longer- and shorter-duration precipitation events and intensities in accordance with best practices. Longer-duration, lower-intensity storms allow time for infiltration and reduce the load on infrastructure over the duration of the storm. Shorter-duration, higher-intensity storms often have higher runoff volumes because the water does not have enough time to infiltrate infrastructure systems (e.g., catch basins) and may overflow or back up during such storms, resulting in flooding. In the Northeast, short-duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. While the Tool does not provide recommended design standards for these scenarios, users should still consider both short- and long-duration precipitation events and how they may impact the asset.

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construction documents without supporting engineering analyses. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence

## Applicable Design Criteria

**Tiered Methodology:** Tier 2

**Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms:** APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Runways and Taxiways	2050	10-Year (10%)	6.1	<a href="#">Downloadable Methodology. PDF</a>

**Projected Riverine Peak Discharge & Peak Flood Elevation:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

## Extreme Heat

High Risk

Target Planning Horizon: 2050

Percentile: 50th Percentile

## Applicable Design Criteria

**Tiered Methodology:** Tier 2

**Projected Annual/Summer/Winter Average Temperatures:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Heat Index:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Growing Degree Days:** NOT APPLICABLE

**Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Number of Heat Waves Per Year & Average Heat Wave Duration:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Cooling Degree Days & Heating Degree Days (base = 65°F):** NOT APPLICABLE

Asset: Hangar Development Areas

Infrastructure

## Sea Level Rise/Storm Surge

Low Risk

## Applicable Design Criteria

**Projected Tidal Datums:** NOT APPLICABLE

**Projected Water Surface Elevation:** NOT APPLICABLE

**Projected Wave Action Water Elevation:** NOT APPLICABLE

**Projected Wave Heights:** NOT APPLICABLE

**Projected Duration of Flooding:** NOT APPLICABLE

**Projected Design Flood Velocity:** NOT APPLICABLE

**Projected Scour & Erosion:** NOT APPLICABLE

## Extreme Precipitation

High Risk

Target Planning Horizon: 2070

Return Period: 25-yr (4%)

**LIMITATIONS:** The recommended Standards for Total Precipitation Depth & Peak Intensity are determined by the user drawn polygon and relationships as defined in the Supporting Documents. The projected Total Precipitation Depth values provided through the Tool are based on the climate projections developed by Cornell University as part of EEA's Massachusetts Climate and Hydrologic

Risk Project, GIS-based data as of 10/15/21. For additional information on the methodology of these precipitation outputs, see Supporting Documents.

While Total Precipitation Depth & Peak Intensity for 24-hour Design Storms are useful to inform planning and design, it is recommended to also consider additional longer- and shorter-duration precipitation events and intensities in accordance with best practices. Longer-duration, lower-intensity storms allow time for infiltration and reduce the load on infrastructure over the duration of the storm. Shorter-duration, higher-intensity storms often have higher runoff volumes because the water does not have enough time to infiltrate infrastructure systems (e.g., catch basins) and may overflow or back up during such storms, resulting in flooding. In the Northeast, short-duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. While the Tool does not provide recommended design standards for these scenarios, users should still consider both short- and long-duration precipitation events and how they may impact the asset.

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## Applicable Design Criteria

**Tiered Methodology:** Tier 2

**Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms:** APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Hangar Development Areas	2070	25-Year (4%)	7.7	<a href="#">Downloadable Methodology PDF</a>

**Projected Riverine Peak Discharge & Peak Flood Elevation:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

## Extreme Heat

High Risk

Target Planning Horizon: 2070  
Percentile: 50th Percentile

## Applicable Design Criteria

**Tiered Methodology:** Tier 2

**Projected Annual/Summer/Winter Average Temperatures:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Heat Index:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Growing Degree Days:** NOT APPLICABLE

**Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Number of Heat Waves Per Year & Average Heat Wave Duration:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 2

**Projected Cooling Degree Days & Heating Degree Days (base = 65°F):** NOT APPLICABLE

Asset: Forested Area

Natural Resources

## Sea Level Rise/Storm Surge

## Applicable Design Criteria

**Projected Tidal Datums:** NOT APPLICABLE

**Projected Water Surface Elevation:** NOT APPLICABLE

**Projected Wave Action Water Elevation:** NOT APPLICABLE

**Projected Wave Heights:** NOT APPLICABLE

Return Period Recommendations for natural resource assets and subsequent projected values are provided as a consideration for users, not a formal standard. Users should follow industry best practices for designing natural resource assets in coordination with the appropriate regulatory agencies.

**Projected Duration of Flooding:** NOT APPLICABLE

**Projected Design Flood Velocity:** NOT APPLICABLE

**Projected Scour & Erosion:** NOT APPLICABLE

### **Extreme Precipitation**

Target Planning Horizon: 2030

**LIMITATIONS:** The recommended Standards for Total Precipitation Depth & Peak Intensity are determined by the user drawn polygon and relationships as defined in the Supporting Documents. The projected Total Precipitation Depth values provided through the Tool are based on the climate projections developed by Cornell University as part of EEA's Massachusetts Climate and Hydrologic Risk Project, GIS-based data as of 10/15/21. For additional information on the methodology of these precipitation outputs, see Supporting Documents.

While Total Precipitation Depth & Peak Intensity for 24-hour Design Storms are useful to inform planning and design, it is recommended to also consider additional longer- and shorter-duration precipitation events and intensities in accordance with best practices. Longer-duration, lower-intensity storms allow time for infiltration and reduce the load on infrastructure over the duration of the storm. Shorter-duration, higher-intensity storms often have higher runoff volumes because the water does not have enough time to infiltrate infrastructure systems (e.g., catch basins) and may overflow or back up during such storms, resulting in flooding. In the Northeast, short-duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. While the Tool does not provide recommended design standards for these scenarios, users should still consider both short- and long-duration precipitation events and how they may impact the asset.

The projected values, standards, and guidance provided within this Tool may be used to inform plans and designs, but they do not provide guarantees for future conditions or resilience. The projected values are not to be considered final or appropriate for construction documents without supporting engineering analyses. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence

### **Applicable Design Criteria**

**Tiered Methodology:** Tier 1

**Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms:** APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Forested Area	2030	25-Year (4%)	6.8	<a href="#">Downloadable Methodology. PDF</a>

Return Period Recommendations for natural resource assets and subsequent projected values are provided as a consideration for users, not a formal standard. Users should follow industry best practices for designing natural resource assets in coordination with the appropriate regulatory agencies.

**ATTENTION: This is a Tier 1 project.** It is advised to compare the extreme precipitation output values to the NOAA+ methodology to calculate total precipitation depth for 24-hr design storms.

This methodology can be found in the following PDF. ([Link](#)).

**Projected Riverine Peak Discharge & Peak Flood Elevation:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 1

### **Extreme Heat**

Target Planning Horizon: 2030

Percentile: 50th Percentile

### **Applicable Design Criteria**

**Tiered Methodology:** Tier 1

**Projected Annual/Summer/Winter Average Temperatures:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 1



**Projected Heat Index:** NOT APPLICABLE

**Projected Growing Degree Days:** APPLICABLE

[Methodology to Estimate Projected Values](#) : Tier 1

**Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F:** NOT APPLICABLE

**Projected Number of Heat Waves Per Year & Average Heat Wave Duration:** NOT APPLICABLE

**Projected Cooling Degree Days & Heating Degree Days (base = 65°F):** NOT APPLICABLE

## Project Inputs

### Core Project Information

Name:	Cape Cod Gateway Master Plan Update
Given the expected useful life of the project, through what year do you estimate the project to last (i.e. before a major reconstruction/renovation)?	2092
Location of Project:	Barnstable
Estimated Capital Cost:	\$111,000,000
Who is the Submitting Entity?	City/Town Barnstable Katie Servis (kservis@flyhya.com)
Is this project identified as a priority project in the Municipal Vulnerability Preparedness (MVP) plan or the local or regional Hazard Mitigation Plan (HMP)?	No
Is this project being submitted as part of a state grant application?	Yes
What stage are you in your project lifecycle?	Planning
Is climate resiliency a core objective of this project?	No
Is this project being submitted as part of the state capital planning process?	Yes
Is this project being submitted as part of a regulatory review process or permitting?	Yes
Brief Project Description:	This airport master plan is required by the FAA in order to plan for the future and highlight airport projects needed to meet demand, including rehabilitation of existing infrastructure. The master plan not only considers the needs of aviation (the airfield, local general aviation, corporate aviation, and commercial aviation) over the next 20 years but also considers the needs of Cape Cod and the local region and economy. Environmental review under MEPA, NEPA and the Cape Cod Commission is part of this project.

Project Submission Comments:

### Project Ecosystem Service Benefits

#### Factors Influencing Output

- ✓ Project provides flood protection through nature-based solutions
- ✓ Project reduces storm damage
- ✓ Project protects public water supply
- ✓ Project promotes decarbonization
- ✓ Project recharges groundwater
- ✓ Project filters stormwater using green infrastructure
- ✓ Project improves water quality
- ✓ Project protects fisheries, wildlife, and plant habitat
- ✓ Project remediates existing sources of pollution
- ✓ Project provides recreation
- ✓ Project improves air quality
- ✓ Project prevents pollution

#### Factors to Improve Output

- ✓ Incorporate nature-based solutions that sequester carbon
- ✓ Preserve, enhance, and/or restore coastal shellfish habitats
- ✓ Incorporate vegetation that provides pollinator habitat
- ✓ Increase plants, trees, and/or other vegetation to provide oxygen production
- ✓ Incorporate education and/or protect cultural resources as part of your project

#### Is the primary purpose of this project ecological restoration?

No

#### Project Benefits

Provides flood protection through nature-based solutions	Yes
Reduces storm damage	Yes
Recharges groundwater	Yes
Protects public water supply	Yes
Filters stormwater using green infrastructure	Yes
Improves water quality	Yes
Promotes decarbonization	Yes
Enables carbon sequestration	No
Provides oxygen production	No
Improves air quality	Yes
Prevents pollution	Yes
Remediates existing sources of pollution	Yes
Protects fisheries, wildlife, and plant habitat	Yes

Protects land containing shellfish	No
Provides pollinator habitat	No
Provides recreation	Yes
Provides cultural resources/education	No

#### Project Climate Exposure

Is the primary purpose of this project ecological restoration?	No
Does the project site have a history of coastal flooding?	No
Does the project site have a history of flooding during extreme precipitation events (unrelated to water/sewer damages)?	No
Does the project site have a history of riverine flooding?	No
Does the project result in a net increase in impervious area of the site?	Yes
Are existing trees being removed as part of the proposed project?	Yes

#### Project Assets

Asset: Terminal Building  
 Asset Type: Typically Occupied  
 Asset Sub-Type: Airport  
 Construction Type: Major Repair/Retrofit  
 Construction Year: 2026  
 Useful Life: 60

**Identify the length of time the asset can be inaccessible/inoperable without significant consequences.**

Building may be inaccessible/inoperable during natural hazard event, but must be accessible/operable within one day after natural hazard event

**Identify the geographic area directly affected by permanent loss or significant inoperability of the building/facility.**

Impacts would be regional (more than one municipality and/or surrounding region)

**Identify the population directly served that would be affected by the permanent loss of use or inoperability of the building/facility.**

Greater than 10,000 people

**Identify if the building/facility provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.**

The building/facility does not provide services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.

**If the building/facility became inoperable for longer than acceptable in Question 1, how, if at all, would it be expected to impact people's health and safety?**

Inoperability of the building/facility would not be expected to result in injuries

**If there are hazardous materials in your building/facility, what are the extent of impacts related to spills/releases of these materials?**

Spills and/or releases of hazardous materials would be relatively easy to clean up

**If the building/facility became inoperable for longer than acceptable in Question 1, what are the impacts on other facilities, assets, and/or infrastructure?**

Significant – Inoperability is likely to impact other facilities, assets, or buildings and will likely affect their ability to operate

**If this building/facility was damaged beyond repair, how much would it approximately cost to replace?**

Between \$30 million and \$100 million

**Is this a recreational facility which can be vacated during a natural hazard event?**

No

**If the building/facility became inoperable for longer than acceptable in Question 1, what are the public and/or social services impacts?**

Some alternative programs and/or services are available to support the community

**If the building/facility became inoperable for longer than acceptable in Question 1, what are the environmental impacts related to natural resources?**

No impact on surrounding natural resources is expected

**If the building/facility became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the building is not able to serve or operate its intended users or function)?**

Loss of building may reduce the ability to maintain some government services, while a majority of services will still exist.

**If the building/facility became inoperable for longer than acceptable in Question 1, what are the impacts to loss of confidence in government (i.e. the building is not able to serve or operate its intended users or function)?**

Reduced morale and public support

Asset: Runways and Taxiways

Asset Type: Transportation

Asset Sub-Type: Other Transportation

Construction Type: Major Repair/Retrofit

Construction Year: 2032

Useful Life: 20

**Identify the length of time the asset can be inaccessible/inoperable without significant consequences.**

Infrastructure may be inaccessible/inoperable more than a week after natural hazard event without consequences.

**Identify the geographic area directly affected by permanent loss or significant inoperability of the infrastructure.**

Impacts limited to location of infrastructure only

**Identify the population directly served that would be affected by the permanent loss or significant inoperability of the infrastructure.**

Less than 5,000 people

**Identify if the infrastructure provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.**

The infrastructure does not provide services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.

**Will the infrastructure reduce the risk of flooding?**

No

**If the infrastructure became inoperable for longer than acceptable in Question 1, how, if at all, would it be expected to impact people's health and safety?**

Inoperability of the infrastructure would not be expected to result in injuries

**If there are hazardous materials in your infrastructure, what are the extents of impacts related to spills/releases of these materials?**

There are no hazardous materials in the infrastructure

**If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts on other facilities, assets, and/or infrastructure?**

Moderate – Inoperability may impact other facilities, assets, or buildings, but cascading impacts do not affect the ability of other facilities, assets, or buildings to operate

**If the infrastructure was damaged beyond repair, how much would it approximately cost to replace?**

Less than \$10 million

**Does the infrastructure function as an evacuation route during emergencies? This question only applies to roadway projects.**

No

**If the infrastructure became inoperable for longer than acceptable in Question 1, what are the environmental impacts related to natural resources?**

No impact on surrounding natural resources is expected

**If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the infrastructure is not able to serve or operate its intended users or function)?**

Loss of infrastructure is not expected to reduce the ability to maintain government services

**What are the impacts to loss of confidence in government resulting from loss of infrastructure functionality (i.e. the infrastructure asset is not able to serve or operate its intended users or function)?**

Loss of confidence in government agency

Asset: Hangar Development Areas

Asset Type: Transportation

Asset Sub-Type: Other Transportation

Construction Type: New Construction

Construction Year: 2032

Useful Life: 60

**Identify the length of time the asset can be inaccessible/inoperable without significant consequences.**

Infrastructure may be inaccessible/inoperable for more than a day, but less than a week after natural hazard without consequences.

**Identify the geographic area directly affected by permanent loss or significant inoperability of the infrastructure.**

Impacts would be limited to local area and/or municipality

**Identify the population directly served that would be affected by the permanent loss or significant inoperability of the infrastructure.**

Less than 5,000 people

**Identify if the infrastructure provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.**

The infrastructure does not provide services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.

**Will the infrastructure reduce the risk of flooding?**

No

**If the infrastructure became inoperable for longer than acceptable in Question 1, how, if at all, would it be expected to impact people's health and safety?**

Inoperability of the infrastructure would not be expected to result in injuries

**If there are hazardous materials in your infrastructure, what are the extents of impacts related to spills/releases of these materials?**

There are no hazardous materials in the infrastructure

**If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts on other facilities, assets, and/or infrastructure?**

Significant – Inoperability is likely to impact other facilities, assets, or buildings and result in cascading impacts that will likely affect their ability to operate

**If the infrastructure was damaged beyond repair, how much would it approximately cost to replace?**

Less than \$10 million

**Does the infrastructure function as an evacuation route during emergencies? This question only applies to roadway projects.**

No

**If the infrastructure became inoperable for longer than acceptable in Question 1, what are the environmental impacts related to natural resources?**

No impact on surrounding natural resources is expected

**If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the infrastructure is not able to serve or operate its intended users or function)?**

Loss of infrastructure is not expected to reduce the ability to maintain government services

**What are the impacts to loss of confidence in government resulting from loss of infrastructure functionality (i.e. the infrastructure asset is not able to serve or operate its intended users or function)?**

Reduced morale and public support

Asset: Forested Area

Asset Type: Forested Ecosystems  
Asset Sub-Type: Upland forest  
Construction Type: New Construction  
Construction Year: 2025  
Monitoring Frequency: 1

## Report Comments

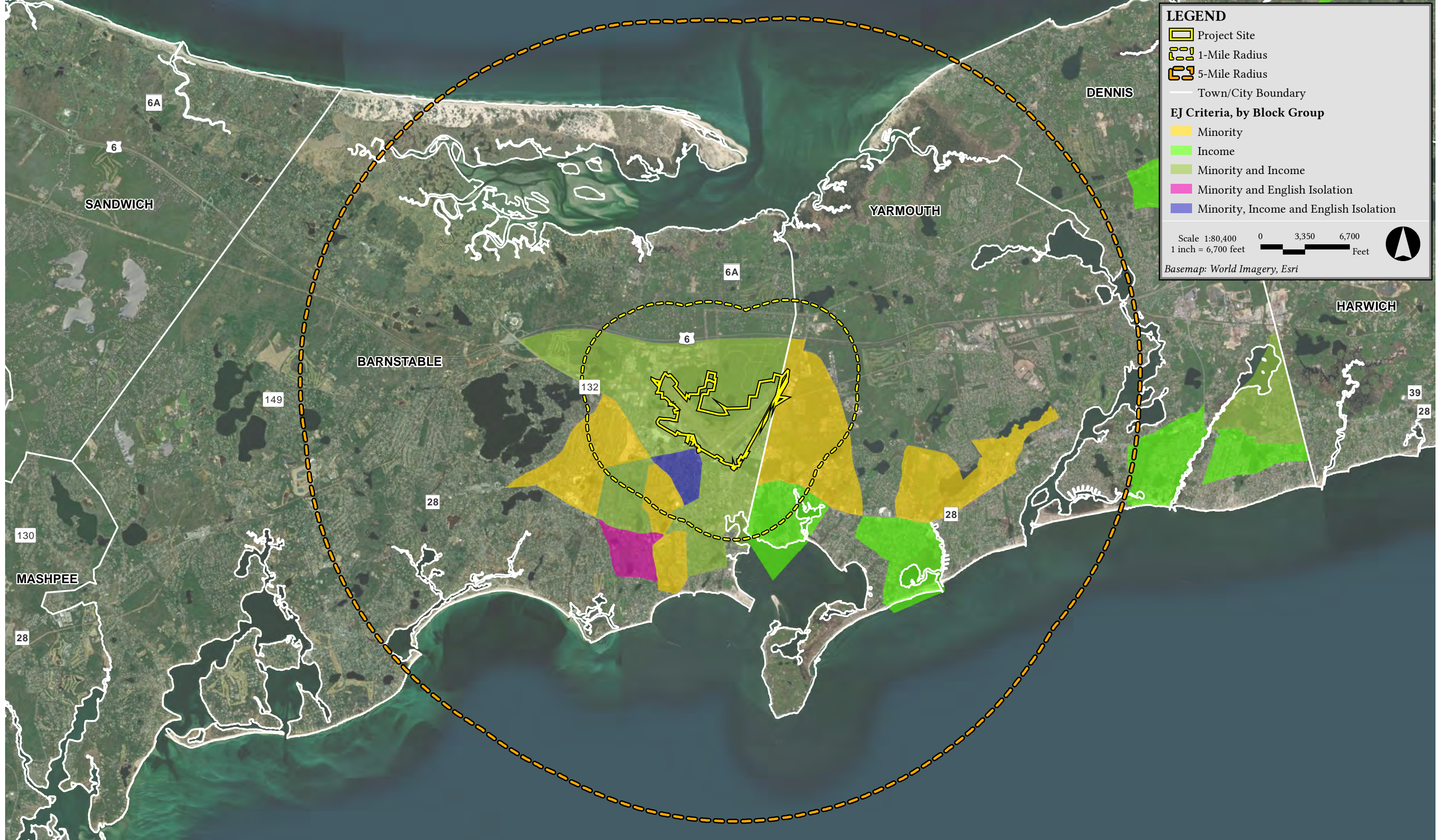
N/A

## **Attachment E**

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EJ Mapping





Cape Cod Gateway Airport Barnstable, Massachusetts

**Figure E-1**  
*Environmental Justice Communities*



## **Attachment F**

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### EJ Distribution List and Screening Form



Statewide Environmental Justice Community Based Organizations					
First Name	Last Name	Title	Phone	Email	Affiliation
Julia	Blatt	Executive Director	(617) 714-4272	danielledolan@massriversalliance.org juliablatt@massriversalliance.org	Mass Rivers Alliance
Elvis	Mendez	Associate Director	508-505-6748	<a href="mailto:elvis@n2nma.org">elvis@n2nma.org</a>	Neighbor to Neighbor
Ben	Hellerstein	MA State Director	617-747-4368	ben@environmentmassachusetts.org	Environment Massachusetts
Claire	B.W. Muller	Movement Building Director	508 308-9261	claire@uumassaction.org	Unitarian Universalist Mass Action Network
Cindy	Luppi	New England Director	617-338-8131 x208	cluppi@cleanwater.org	Clean Water Action
Deb	Pasternak	Director, MA Chapter	617-423-5775	deb.pasternak@sierraclub.org	Sierra Club MA
Heather	Clish	Director of Conservation & Recreation Policy	(617) 523-0655	hclish@outdoors.org	Appalachian Mountain Club
Heidi	Ricci	Director of Policy	Not Provided	hricci@massaudubon.org	Mass Audubon
Kelly	Boling	MA & RI State Director	(617) 367-6200	<a href="mailto:kelly.boling@tpl.org">kelly.boling@tpl.org</a>	The Trust for Public Land
Kerry	Bowie	Board President	Not Provided	kerry@msaadapartners.com	Browning the GreenSpace
Nancy	Goodman	Vice President for Policy	Not Provided	ngoodman@environmentalleague.org	Environmental League of MA
Rob	Moir	Executive Director	Not Provided	rob@oceanriver.org	Ocean River Institute
Robb	Johnson	Executive Director	(978) 443-2233	<a href="mailto:robb@massland.org">robb@massland.org</a>	Mass Land Trust Coalition
Staci	Rubin	Senior Attorney	617 350-0990	srubin@clf.org	Conservation Law Foundation
Sylvia	Broude	Executive Director	617 292-4821	<a href="mailto:sylvia@communityactionworks.org">sylvia@communityactionworks.org</a>	Community Action Works

Indigenous Organizations					
First Name	Last Name	Title	Phone	Email	Affiliation
Alma	Gordon	President	Not Provided	tribalcouncil@chappaquiddickwampanoag.org	Chappaquiddick Tribe of the Wampanoag Nation
Cheryll	Toney Holley	Chair	774-317-9138	<a href="mailto:crwritings@aol.com">crwritings@aol.com</a>	Nipmuc Nation (Hassanamisco Nipmucs)
John	Peters, Jr.	Executive Director	617-573-1292	john.peters@mass.gov	Massachusetts Commission on Indian Affairs (MCIA)
Kenneth	White	Council Chairman	508-347-7829	<a href="mailto:acw1213@verizon.net">acw1213@verizon.net</a>	Chaubunagungamaug Nipmuck Indian Council
Melissa	Ferretti	Chair	(508) 304-5023	melissa@herringpondtribe.org	Herring Pond Wampanoag Tribe
Patricia	D. Roker	Council Chair	Not Provided	rockerpatriciad@verizon.net	Chappaquiddick Tribe of the Wampanoag Nation, Whale Clan
Raquel	Halsey	Executive Director	(617) 232-0343	rhalsey@naicob.org	North American Indian Center of Boston
Cora	Pierce	Not Provided	Not Provided	<a href="mailto:Coradot@yahoo.com">Coradot@yahoo.com</a>	Pocasset Wampanoag Tribe
Elizabeth	Soloman	Not Provided	Not Provided	<a href="mailto:Solomon.Elizabeth@gmail.com">Solomon.Elizabeth@gmail.com</a>	Massachusetts Tribe at Ponkapoag

Federally Recognized Tribes						
First	Last	Title	Phone	Email	Affiliation	Notes
Bettina	Washington	Tribal Historic Preservation Officer	508-560-9014	<a href="mailto:thpo@wampanoagtribe-nsn.gov">thpo@wampanoagtribe-nsn.gov</a>	Wampanoag Tribe of Gay Head (Aquinnah)	
Stockbridge-Munsee Tribe		Historic Preservation Manager	413-884-6048	<a href="mailto:THPO@Mohican-nsn.gov">THPO@Mohican-nsn.gov</a>	Stockbridge-Munsee Tribe	Only for projects in: Berkshire County, Agawam, Amherst, Athol, Charlemont, Chicopee, Easthampton, Gardner, Greenfield, Hadley, Heath, Hubbardston, Ludlow, Monroe, Northampton, Orange, Palmer, Rowe, Royalston, Southwick, Springfield, Sunderland, Ware, Wendell, West Springfield, Westfield
Brian	Weeden	Chair	774-413-0520	<a href="mailto:Brian.Weeden@mwtribe-nsn.gov">Brian.Weeden@mwtribe-nsn.gov</a>	Mashpee Wampanoag Tribe	

First Name	Last Name	Title	Service Area	Phone Number	Email	Affiliation
Barry	Margolin	Chair, Policy & Program Committee	Hyannis	Not provided	<a href="mailto:info@capecodclimate.org">info@capecodclimate.org</a>	Cape Cod Climate Change Collaborative
Kristina	Dower	Executive Director	Hyannis	508-771-1727	<a href="mailto:info@cacci.cc">info@cacci.cc</a>	Community Action Committee of Cape Cod & Islands

## Nathan Rawding

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**From:** Hiromi M. Hashimoto  
**Sent:** Wednesday, October 12, 2022 3:33 PM  
**To:** MEPA-EJ (EEA); danielledolan@massriversalliance.org; juliablatt@massriversalliance.org; elvis@n2nma.org; ben@environmentmassachusetts.org; claire@uumassaction.org; cluppi@cleanwater.org; deb.pasternak@sierraclub.org; hclish@outdoors.org; hricci@massaudubon.org; kelly.boling@tpl.org; kerry@msaadapartners.com; ngoodman@environmentalleague.org; rob@oceanriver.org; robb@massland.org; srubin@clf.org; sylvia@communityactionworks.org; tribalcouncil@chappaquiddickwampanoag.org; crwritings@aol.com; john.peters@mass.gov; acw1213@verizon.net; melissa@herringpondtribe.org; rockerpatriciad@verizon.net; rhalsey@naicob.org; Coradot@yahoo.com; Solomon.Elizabeth@gmail.com; thpo@wampanoagtribe-nsn.gov; THPO@Mohican-nsn.gov; Brian.Weeden@mwtribe-nsn.gov; info@capecodclimate.org; info@cacci.cc  
**Cc:** Alyssa Jacobs; Nathan Rawding; Servis, Katie; melia@flyhya.com; ereed@hshassoc.com  
**Subject:** Advance Notification of Proposed Improvements at Cape Cod Gateway Airport in Hyannis, MA  
**Attachments:** English\_EJ screening form\_10122022.pdf; Portuguese\_EJ screening form\_10122022.pdf; Spanish\_EJ screening form\_10122022.pdf; Figure\_EJ\_Populations.pdf

Good afternoon,

On behalf of the Proponent, Cape Cod Gateway Airport, I am pleased to send you this advance notification of the proposed improvements for Cape Cod Gateway Airport in Hyannis, MA.

Community-based organizations and tribal organizations are receiving this notification in accordance with the MEPA Public Involvement Protocol for Environmental Justice Populations, which took effect on January 1, 2022. More information is available on the [MEPA website](#).

The proposed improvements consist of Runway Extensions; Runway Safety Area Enhancements; Taxiway Modifications; Terminal Improvements; General Aviation (GA) Improvements; and Non-Aeronautical Land Use Development Areas. More general information about the Project and how community members can become engaged is provided in the attached English, Spanish, and Portuguese Environmental Justice Screening Forms.

The Proponent plans to submit an Environmental Notification Form (ENF) to the Massachusetts Environmental Policy Act (MEPA) Office to initiate state environmental review of the project, no sooner than November 30, 2022.

If you are interested in learning more about the project or would like to receive a paper copy of the attached notice, please feel free to contact Alyssa Jacobs at [enviroHYA@epsilonassociates.com](mailto:enviroHYA@epsilonassociates.com).

Thank you for your interest in this project.

Kind regards,

Hiromi M. Hashimoto

Epsilon Associates, Inc.

Mobile: 949-572-5980

[hhashimoto@epsilonassociates.com](mailto:hhashimoto@epsilonassociates.com)

## Environmental Justice Screening Form

Project Name	Cape Cod Gateway Airport Master Plan Projects
Anticipated Date of MEPA Filing	November/December 2022
Proponent Name	Cape Cod Gateway Airport
Contact Information (e.g., consultant)	Alyssa Jacobs Epsilon Associates, Inc. 3 Mill & Main, Suite 250 Maynard, MA 01754 Phone: 978-897-7100 Email: <a href="mailto:ajacobs@epsilonassociates.com">ajacobs@epsilonassociates.com</a> Project Email: <a href="mailto:enviroHYA@epsilonassociates.com">enviroHYA@epsilonassociates.com</a>
Public website for project or other physical location where project materials can be obtained (if available)	<a href="https://flyhya.com/environmental-assessment/">https://flyhya.com/environmental-assessment/</a>
Municipality and Zip Code for Project (if known)	Hyannis, MA, 02601
Project Type* (list all that apply)	Airport
Is the project site within a mapped 100-year FEMA flood plain? Y/N/unknown	N
Estimated GHG emissions of conditioned spaces ( <a href="#">click here for GHG Estimation tool</a> )	Terminal building enhancements GHG estimates: 24,400 sq. ft. additional space proposed 6.4 lbs. CO2/sf-yr. / 78 tons per year

### Project Description

<p>1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.</p> <p><b>The Proponent proposes several improvements to the Cape Cod Gateway Airport as detailed in the 2020 Master Plan over the next 5-8 years including</b></p> <ul style="list-style-type: none"> <li>• <b>Extending both ends of Runway 15-33. The Runway 15 end would be lengthened by approximately 895 feet and the Runway 33 end would be lengthened by approximately 400 feet.</b></li> <li>• <b>Installing an approximately 200-foot by 400-foot engineered material arresting system (EMAS) to the Runway 24 end.</b></li> <li>• <b>Extending Taxiway A to meet the standards of a full-length parallel taxiway to Runway 15-33.</b></li> <li>• <b>Constructing a partial parallel taxiway with a 400-foot standard separation east of Runway 15-33 from Taxiway B to existing Taxiway A1.</b></li> <li>• <b>Reconfiguring existing Taxiway D parallel to Runway 15-33.</b></li> <li>• <b>Constructing a run-up area along the north side of the proposed partial parallel</b></li> </ul>
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<p><b>Taxiway D and removing the existing Taxiway E run-up pit.</b></p> <ul style="list-style-type: none"> <li>• <b>Removing Taxiway E.</b></li> <li>• <b>Expanding the existing terminal building for current and future demand.</b></li> <li>• <b>Airport aviation development areas (East Ramp and North Ramp).</b></li> <li>• <b>Easement Acquisition for existing and future airspace surfaces to control and remove obstruction as necessary for aviation safety and compliance with FAA standards.</b></li> </ul>							
<p>2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)</p> <ul style="list-style-type: none"> <li>• <b>11.03(6)b(iii) Expansion of an existing runway at an airport.</b></li> <li>• <b>11.03(6)b(iv) Construction of a New taxiway at an airport.</b></li> <li>• <b>11.03(1)a(2). Creation of ten or more acres of impervious area.</b></li> </ul>							
<p>3. List all anticipated state, local and federal permits needed for the project (if known)</p> <ul style="list-style-type: none"> <li>• <b>Massachusetts Department of Environmental Protection (MassDEP) Water Quality Certification (WQC) pursuant to Section 401 of the Clean Water Act</b></li> <li>• <b>Order of Conditions from Barnstable Conservation Commission</b></li> <li>• <b>Massachusetts General Permit pursuant to Section 404 of the Clean Water Act</b></li> <li>• <b>NPDES Construction General Permit</b></li> </ul>							
<p>4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map identifying 5-mile radius from <a href="#">EJ Maps Viewer</a> in lieu of narrative)  <b>The Proponent identified 15 Environmental Justice (EJ) Populations within 5 miles of the Project site (see Figure 1).</b></p>							
Block Group	Census Tract	County	Town	Criteria	Total Minority Population	Households with Language Isolation	Median Household Income
1	120.02	Barnstable	Yarmouth	Income	14.4%	6.5%	\$49,875 (58.1% of the MA median)
1	121.01	Barnstable	Yarmouth	Minority	29.6%	0%	\$67,258 (78.4% of the MA median)
3	121.01	Barnstable	Yarmouth	Income	13.4%	0%	\$50,481 (58.8% of the MA median)
4	126.02	Barnstable	Barnstable	Minority	46.2%	9.5%	\$57,750 (67.3% of the MA median)
3	126.02	Barnstable	Barnstable	Minority	43.1%	6.1%	\$58,631 (68.3% of the MA median)
3	121.02	Barnstable	Yarmouth	Income	9.6%	0%	\$53,750 (62.6% of the MA

							median)
1	121.02	Barnstable	Yarmouth	Income	15.7%	8.4%	\$56,016 (65.3% of the MA median)
3	153	Barnstable	Barnstable	Minority and Income	29.6%	18.5%	\$31,063 (36.2% of the MA median)
2	121.01	Barnstable	Yarmouth	Minority	33.2%	0%	\$77,875 (90.7% of the MA median)
2	126.01	Barnstable	Barnstable	Minority	39.4%	2.1%	\$81,364 (94.8% of the MA median)
1	126.02	Barnstable	Barnstable	Minority and Income	34.1%	2.6%	\$38,125 (44.4% of the MA median)
2	126.02	Barnstable	Barnstable	Minority and Income	30.8%	23%	\$49,958 (58.2% of the MA median)
2	153	Barnstable	Barnstable	Minority and Income	44.3%	3.7%	\$26,339 (30.7% of the MA median)
3	125.02	Barnstable	Barnstable	Minority	48.7%	14.2%	\$70,437 (82.1% of the MA median)
4	125.02	Barnstable	Barnstable	Minority	46.9%	19.4%	\$66,438 (77.4% of the MA median)

Using the EJ Maps Viewer that identifies “Languages Spoken in Massachusetts”, the Proponent found that there are eight tracts with 5% or more of the population who do not speak English very well within five miles of the Project site. These populations speak the following languages:

- Portuguese or Portuguese Creole

5. Identify any municipality or census tract meeting the definition of “vulnerable health EJ criteria” in the [DPH EJ Tool](#) located in whole or in part within a 1 mile radius of the project site

**The Proponent identified two towns within one mile of the Project site: Barnstable and Yarmouth. Using the DPH EJ Tool, only one town was identified as potentially suffering from environmentally related health burdens:**

- Barnstable – Childhood Asthma

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation

**The Project is anticipated to result in temporary air quality and noise impacts due to construction activities. However, these impacts are not anticipated to exacerbate any existing unfair or inequitable environmental or public health burden on the EJ populations in the DGA.**

**All impacts will be reviewed through MEPA and the various permitting programs and will be**



**appropriately mitigated in accordance with applicable regulations. No long-term environmental and public health impacts on EJ populations are anticipated as a result of the Project.**

7. Identify project benefits, including “Environmental Benefits” as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population

- **Provides new opportunities for commercial growth within an area zoned for commercial/industrial development.**
- **Contributes to the economy of the region.**
- **Provides significant new construction and long-term job opportunities.**
- **Improves operational safety and efficiency of the Airport.**
- **The Airport is reserving space on either side of the terminal to plan for electric aircraft charging for both GA and commercial aircraft.**
- **Electric vehicle charging and solar panels on vehicle awnings and hangars.**
- **Modified guidelines for construction to include initiatives for green development.**
- **Continued PFAS remediation efforts related to historic Airport operations.**

8. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting . Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

**The Proponent is willing to meet with community members at times and locations that are convenient to the public. The Airport’s consultant team includes community engagement specialists who will continue to provide outreach to EJ communities and neighboring communities using the following methods: postcard mailings, a dedicated website for updates <https://flyhya.com/environmental-assessment/> and documents related to the Projects, several in-person community meetings (in addition to regulatory meetings), and pop-up information events in the community (e.g., at the library).**

**A community meeting is scheduled for October 27, 2022, at 6 PM at the Cape Cod Gateway Airport.**

**To request additional meetings and any needed accommodations (including oral language interpretation services), please contact the project email address:**

**[enviroHYA@epsilonassociates.com](mailto:enviroHYA@epsilonassociates.com)**

## Formulário de Triagem de Justiça Ambiental

Nome do projeto	Cape Cod Gateway Airport Master Plan Projects (Projetos do Plano Diretor do Aeroporto Cape Cod Gateway)
Data prevista do requerimento MEPA	Novembro/dezembro de 2022
Nome do proponente	Cape Cod Gateway Airport
Informações de contato (p. ex., consultor)	Alyssa Jacobs Epsilon Associates, Inc. 3 Mill & Main, Suite 250 Maynard, MA 01754 Telefone: 978-897-7100 E-mail: <a href="mailto:ajacobs@epsilonassociates.com">ajacobs@epsilonassociates.com</a> E-mail do projeto: <a href="mailto:enviroHYA@epsilonassociates.com">enviroHYA@epsilonassociates.com</a>
Site público do projeto ou outro local físico onde os materiais do projeto podem ser obtidos (se disponível)	<a href="https://flyhya.com/environmental-assessment/">https://flyhya.com/environmental-assessment/</a>
Município e código postal do projeto (se conhecidos)	Hyannis, MA, 02601
Tipo de projeto* (listar todos os que se aplicam)	Aeroporto
O local do projeto está dentro de uma planície de inundação de 100 anos mapeada da FEMA? S/N/desconhecido	N
Emissões de GEE estimadas de espaços condicionados ( <a href="#">clique aqui para acessar a ferramenta de estimativa de GEE</a> )	Estimativas de GEE para as melhorias ao edifício do terminal: 24.400 pés quadrados de espaço adicional proposto 6,4 lb. de CO <sub>2</sub> /pé quadrado-ano / 78 toneladas por ano

### Descrição do projeto

1. Forneça uma breve descrição do projeto, incluindo o tamanho geral do local do projeto e a área dos edifícios e estruturas propostos, se conhecidos.

**O Proponente propõe diversas melhorias ao Aeroporto Cape Cod Gateway, conforme detalhado no Plano Diretor de 2020, nos próximos 5–8 anos, incluindo**

- **Extensão de ambas as extremidades da Pista 15–33. A extremidade da Pista 15 seria estendida em aproximadamente 895 pés e a extremidade da Pista 33 seria estendida em aproximadamente 400 pés.**
- **Instalação de um sistema de desaceleração com materiais projetados (EMAS, de engineered material arresting system) de aproximadamente 200 pés por 400 pés na extremidade da Pista 24.**
- **Extensão da Pista de Rolamento A para atender aos padrões de uma pista de rolamento paralela de comprimento total para a Pista 15-33.**
- **Construção de uma pista de rolamento paralela parcial com uma separação padrão**

<p>de 400 pés a leste da Pista 15-33, da Pista de Rolamento B para a Pista de Rolamento A1 existente.</p> <ul style="list-style-type: none"> <li>• Reconfiguração da Pista de Rolamento D existente paralela à Pista 15-33.</li> <li>• Construção de uma área de run-up ao longo do lado norte da Pista de Rolamento D paralela parcial proposta e remoção do poço de run-up da Pista de Rolamento E existente.</li> <li>• Remoção da Pista de Rolamento E.</li> <li>• Expansão do edifício do terminal existente para a demanda atual e futura.</li> <li>• Áreas de desenvolvimento de aviação do aeroporto (Rampa Leste e Rampa Norte).</li> <li>• Aquisição de servidão para superfícies de espaço aéreo existentes e futuras para controlar e remover obstruções conforme necessário para a segurança da aviação e conformidade com os padrões da FAA.</li> </ul>							
<p>2. Liste os limiares de análise do MEPA previstos (301 CMR 11.03) (se conhecidos)</p> <ul style="list-style-type: none"> <li>• <b>11.03(6)b(iii) Ampliação de uma pista existente em um aeroporto.</b></li> <li>• <b>11.03(6)b(iv) Construção de uma nova pista de rolamento em um aeroporto.</b></li> <li>• <b>11.03(1)a(2). Criação de dez ou mais acres de área impermeável.</b></li> </ul>							
<p>3. Liste todas as licenças estaduais, locais e federais necessárias previstas para o projeto (se conhecidas)</p> <ul style="list-style-type: none"> <li>• <b>Certificação de Qualidade da Água (WQC) do Departamento de Proteção Ambiental de Massachusetts (MassDEP) de acordo com a Seção 401 da Lei de Água Limpa</b></li> <li>• <b>Ordem de Condições da Comissão de Conservação de Barnstable</b></li> <li>• <b>Alvará Geral de Massachusetts de acordo com a Seção 404 da Lei de Água Limpa</b></li> <li>• <b>Alvará Geral de Construção do NPDES</b></li> </ul>							
<p>4. Identifique as populações e características de JA (justiça ambiental) (minorias, renda, isolamento do inglês) dentro de 5 milhas do local do projeto (pode-se anexar o mapa do <a href="#">EJ Maps Viewer</a> identificando um raio de 5 milhas em vez de descrever).</p> <p><b>O Proponente identificou 15 Populações de Justiça Ambiental (JA) dentro de 5 milhas do local do Projeto (ver Figura 1).</b></p>							
Grupo de quadras	Setor censitário	Condado	Cidade	Crítérios	População minoritária total	Famílias com isolamento linguístico	Renda familiar mediana
1	120,02	Barnstable	Yarmouth	Renda	14,4%	6,5%	US\$ 49.875 (58,1% da mediana de MA)
1	121,01	Barnstable	Yarmouth	Minorias	29,6%	0%	US\$ 67.258 (78,4% da mediana de MA)

3	121,01	Barnstable	Yarmouth	Renda	13,4%	0%	US\$ 50.481 (58,8% da mediana de MA)
4	126,02	Barnstable	Barnstable	Minoria	46,2%	9,5%	US\$ 57.750 (67,3% da mediana de MA)
3	126,02	Barnstable	Barnstable	Minoria	43,1%	6,1%	US\$ 58.631 (68,3% da mediana de MA)
3	121,02	Barnstable	Yarmouth	Renda	9,6%	0%	US\$ 53.750 (62,6% da mediana de MA)
1	121,02	Barnstable	Yarmouth	Renda	15,7%	8,4%	US\$ 56.016 (65,3% da mediana de MA)
3	153	Barnstable	Barnstable	Minoria e renda	29,6%	18,5%	US\$ 31.063 (36,2% da mediana de MA)
2	121,01	Barnstable	Yarmouth	Minoria	33,2%	0%	US\$ 77.875 (90,7% da mediana de MA)
2	126,01	Barnstable	Barnstable	Minoria	39,4%	2,1%	US\$ 81.364 (94,8% da mediana de MA)
1	126,02	Barnstable	Barnstable	Minoria e renda	34,1%	2,6%	US\$ 38.125 (44,4% da mediana de MA)
2	126,02	Barnstable	Barnstable	Minoria e renda	30,8%	23%	US\$ 49.958 (58,2% da mediana de MA)
2	153	Barnstable	Barnstable	Minoria e renda	44,3%	3,7%	US\$ 26.339 (30,7% da mediana de MA)
3	125,02	Barnstable	Barnstable	Minoria	48,7%	14,2%	US\$ 70.437 (82,1% da mediana de MA)
4	125,02	Barnstable	Barnstable	Minoria	46,9%	19,4%	US\$ 66.438 (77,4% da mediana de MA)

Usando o EJ Maps Viewer, que identifica os idiomas falados em Massachusetts, o Proponente determinou que existem oito setores com 5% ou mais da população que não fala inglês muito bem dentro de cinco milhas do local do Projeto. Essas populações falam os seguintes idiomas:

- Português ou crioulo português

5. Identifique qualquer município ou setor censitário que atenda à definição de “vulnerable health EJ criteria” (critérios de saúde vulnerável de JA) na [Ferramenta DPH EJ](#) localizado total ou parcialmente dentro de um raio de 1 milha do local do projeto

**O Proponente identificou duas cidades dentro de uma milha do local do Projeto:**

**Barnstable e Yarmouth. Usando a Ferramenta DPH EJ, apenas uma cidade foi identificada como potencialmente sofrendo de problemas de saúde relacionados ao meio ambiente:**

- Barnstable – asma infantil

6. Identifique possíveis impactos ambientais e de saúde pública de curto e longo prazo que podem afetar as populações de JA e qualquer mitigação prevista

**Prevê-se que o Projeto resulte em impactos temporários na qualidade do ar e ruído devido às atividades de construção. No entanto, não se prevê que esses impactos exacerbem qualquer ônus ambiental ou de saúde pública injusto ou desigual existente sobre as populações de JA na DGA. Todos os impactos serão analisados por meio do MEPA e dos vários programas de licenciamento e serão adequadamente mitigados de acordo com os regulamentos que se apliquem. Não são previstos impactos ambientais e de saúde pública de longo prazo nas populações de JA como resultado do Projeto.**

7. Identifique os benefícios do projeto, incluindo “Benefícios Ambientais”, conforme definição do 301 CMR 11.02, que podem melhorar as condições ambientais ou a saúde pública da população de JA.

- Oferece novas oportunidades de crescimento comercial dentro de uma área de desenvolvimento comercial/industrial.
- Contribui para a economia da região.
- Fornece novas oportunidades de emprego na construção e de longo prazo significativas.
- Melhora a eficiência e segurança operacional do aeroporto.
- O aeroporto está reservando espaço em ambos os lados do terminal para o planejamento de carregamento de aeronaves elétricas para aeronaves de aviação geral e comerciais.
- Carregamento de veículos elétricos e painéis solares em hangares e toldos de veículos.
- Diretrizes modificadas para construção a fim de incluir iniciativas de desenvolvimento ecológico.
- Esforços contínuos de remediação de PFAS relacionados às operações históricas do aeroporto.

8. Descreva como a comunidade pode solicitar uma reunião para discutir o projeto e como a comunidade pode solicitar serviços de interpretação oral na reunião. Especifique como solicitar outras adaptações, incluindo reuniões fora do horário comercial e em locais próximos ao transporte público.

**O Proponente está disposto a se reunir com os membros da comunidade em horários e locais que sejam convenientes para o público. A equipe de consultores do aeroporto inclui especialistas em engajamento da comunidade que continuarão a atender as comunidades de JA e as comunidades vizinhas usando os seguintes métodos: correspondências postais, um site dedicado para atualizações <https://flyhya.com/environmental-assessment/> e documentos relacionados aos Projetos, várias reuniões comunitárias presenciais (além de reuniões regulatórias) e eventos pop-up informativos na comunidade (p. ex., na biblioteca).**

**Uma reunião comunitária está agendada para 27 de outubro de 2022, às 18h, no Aeroporto Cape Cod Gateway.**

**Para solicitar reuniões adicionais e quaisquer acomodações necessárias (incluindo serviços de interpretação oral), entre em contato pelo endereço de e-mail do projeto:**

**[enviroHYA@epsilonassociates.com](mailto:enviroHYA@epsilonassociates.com)**



## Formulario de Investigación de Justicia Ambiental

Nombre del proyecto	Proyectos del Plan Maestro del Aeropuerto Cape Cod Gateway
Fecha prevista de la presentación ante la MEPA	Noviembre/Diciembre de 2022
Nombre del proponente	Aeropuerto Cape Cod Gateway
Información de contacto (por ej., consultor)	Alyssa Jacobs Epsilon Associates, Inc. 3 Mill & Main, Suite 250 Maynard, MA 01754 Teléfono: 978-897-7100 Correo electrónico: <a href="mailto:ajacobs@epsilonassociates.com">ajacobs@epsilonassociates.com</a> Correo electrónico del proyecto: <a href="mailto:enviroHYA@epsilonassociates.com">enviroHYA@epsilonassociates.com</a>
Sitio web público u otra ubicación física donde se pueden obtener los materiales del proyecto (si están disponibles)	<a href="https://flyhya.com/environmental-assessment/">https://flyhya.com/environmental-assessment/</a>
Municipalidad y código postal del proyecto (si se conocen)	Hyannis, MA, 02601
Tipo de proyecto* (enumere todos los que correspondan)	Aeropuerto
¿El sitio del proyecto se encuentra dentro de una llanura aluvial de la FEMA con 100 años y mapeada? S/N/No se sabe	N
Emisiones de gases con efecto invernadero (GEI) estimadas de los espacios acondicionados ( <a href="#">haga clic aquí para obtener la herramienta de estimación de GEI</a> )	Estimaciones de GEI de las mejoras del edificio de la terminal: 24 400 pies cuadrados (2230 m <sup>2</sup> ) de espacio adicional propuesto 6,4 lb (2,9 kg) CO <sub>2</sub> /sf-año / 78 toneladas por año

### Descripción del proyecto

<p>1. Brinde una breve descripción del proyecto, incluyendo el tamaño general del sitio del proyecto y la superficie cuadrada de los edificios y las estructuras propuestos, si se conocen.</p> <p><b>El Proponente propone varias mejoras al Aeropuerto Cape Cod Gateway, como se detalla en el Plan Maestro 2020, durante los próximos 5 a 8 años, que incluyen</b></p> <ul style="list-style-type: none"> <li>• <b>Ampliación de ambos extremos de las Pistas 15-33. El extremo de la Pista 15 se alargaría aproximadamente 895 pies (270 m) y el extremo de la Pista 33 se alargaría aproximadamente 400 pies (122 m).</b></li> <li>• <b>Instalación de un sistema de frenado de emergencia de umbral de pista (Engineered Material Arresting System - EMAS) de aproximadamente 200 pies (60 m) por 400 pies (120 m) al extremo de la Pista 24.</b></li> </ul>
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- Ampliación de la Calle de Rodaje A para cumplir con los estándares de una calle de rodaje de longitud completa paralela a la Pista 15-33.
- Construcción de una calle de rodaje paralela parcial con una separación estándar de 400 pies (120 m) al este de la Pista 15-33 desde la Calle de Rodaje B hasta la Calle de Rodaje A1 existente.
- Reconfiguración de la Calle de Rodaje D existente paralela a la Pista 15-33.
- Construcción de un área de rodaje a lo largo del lado norte de la Calle de Rodaje D paralela parcial propuesta y eliminación del área de verificación de la Calle de Rodaje E existente.
- Eliminación de la Calle de Rodaje E.
- Ampliación del edificio terminal existente para la demanda actual y futura.
- Áreas de desarrollo aeronáutico del aeropuerto (Rampa Este y Rampa Norte).
- Adquisición de servidumbre para superficies de espacio aéreo existentes y futuras para controlar y eliminar obstrucciones según sea necesario para la seguridad de la aviación y el cumplimiento de los estándares de la FAA.

2. Enumere los umbrales de revisión previstos de la MEPA (301 CMR 11.03) (si se conocen)

- **11.03(6)b(iii) Ampliación de una pista existente en un aeropuerto.**
- **11.03(6)b(iv) Construcción de una nueva Calle de Rodaje en un aeropuerto.**
- **11.03(1)a(2). Creación de 5 o más acres (2 o más hectáreas) de área impermeable.**

3. Enumere todos los permisos estatales, locales y federales previstos que se necesitan para el proyecto (si se conocen)

- **Certificación de calidad del agua (WQC) del Departamento de Protección Ambiental de Massachusetts (MassDEP), de conformidad con la Sección 401 de la Ley de Agua Limpia**
- **Orden de Condiciones de la Comisión de Conservación Barnstable**
- **Permiso General de Massachusetts conforme a la Sección 404 de la Ley de Agua Limpia**
- **Permiso General de Construcción NPDES**

4. Identifique a las poblaciones de Justicia Ambiental (EJ) y las características (minoría, ingresos, aislamiento del inglés) dentro de las 5 millas (8 km) del sitio del proyecto (puede adjuntar un mapa que identifique el radio de 5 millas del [EJ Maps Viewer](#) en vez de hacer la descripción textual)  
**El Proponente identificó 15 poblaciones de Justicia Ambiental (EJ) dentro de las 5 millas (8 km) del sitio del proyecto (Figura 1).**

Grupo de cuadr as	Área de censo	Condado	Ciudad	Criterios	Población minoritari a total	Hogares con aislamiento idiomático	Ingresos promedio del hogar
1	120,02	Barnstable	Yarmouth	Ingresos	14,4%	6,5%	USD 49 875

							(58,1 % del promedio de MA)
1	121,01	Barnstable	Yarmouth	Minoría	29,6%	0%	USD 67.258 875 (78,4 % del promedio de MA)
3	121,01	Barnstable	Yarmouth	Ingresos	13,4%	0%	USD 50.481 875 (58,8 % del promedio de MA)
4	126,02	Barnstable	Barnstable	Minoría	46,2%	9,5%	USD 57.750 875 (67,3 % del promedio de MA)
3	126,02	Barnstable	Barnstable	Minoría	43,1%	6,1%	USD 58.631 875 (68,3 % del promedio de MA)
3	121,02	Barnstable	Yarmouth	Ingresos	9,6%	0%	USD 53.750 875 (62,6 % del promedio de MA)
1	121,02	Barnstable	Yarmouth	Ingresos	15,7%	8,4%	USD 56.016 875 (65,3 % del promedio de MA)
3	153	Barnstable	Barnstable	Minoría e ingresos	29,6%	18,5%	USD 31.063 875 (36,2 % del promedio de MA)
2	121,01	Barnstable	Yarmouth	Minoría	33,2%	0%	USD 77.875 875 (90,7 % del promedio de MA)
2	126,01	Barnstable	Barnstable	Minoría	39,4%	2,1%	USD 81.364 875 (94,8 % del promedio de MA)
1	126,02	Barnstable	Barnstable	Minoría e ingresos	34,1%	2,6%	USD 38.125 875 (44,4 % del promedio de MA)
2	126,02	Barnstable	Barnstable	Minoría e ingresos	30,8%	23%	USD 49.958 875 (58,2 % del promedio de MA)
2	153	Barnstable	Barnstable	Minoría e ingresos	44,3%	3,7%	USD 26.339 875 (30,7 % del promedio de MA)
3	125,02	Barnstable	Barnstable	Minoría	48,7%	14,2%	USD 70.437 875 (82,1 % del

							promedio de MA)
4	125,02	Barnstable	Barnstable	Minoría	46,9%	19,4%	USD 66.438 875 (77,4 % del promedio de MA)

Usando el EJ Maps Viewer que identifica los “Idiomas hablados en Massachusetts”, el Proponente descubrió que hay 8 grupos donde 5 % o más de la población no habla inglés muy bien y se encuentran dentro de cinco millas (8 km) del lugar del proyecto. Estas poblaciones hablan los siguientes idiomas:

- portugués o lenguas criollas de base portugués

5. Identifique a cualquier municipalidad o área de censo que corresponda a la definición de “criterios de EJ sobre vulnerabilidad sanitaria” en la [DPH EJ Tool](#) ubicada en su totalidad o en parte dentro de un radio de 1 milla (1,6 km) del sitio del proyecto

**El Proponente identificó dos municipalidades dentro de una milla del lugar del proyecto: Barnstable y Yarmouth. Usando la herramienta DPH EJ, solo se identificó una ciudad que podría sufrir problemas de salud relacionados con el medio ambiente:**

- Barnstable: asma infantil

6. Identifique el impacto potencial a corto y largo plazo en la salud pública y el medio ambiente que pueda afectar a las poblaciones de EJ y cualquier mitigación prevista

**Se prevé que el Proyecto resulte en impactos temporales en la calidad del aire y el ruido debido a las actividades de construcción. Sin embargo, no se anticipa que estos impactos exacerben ninguna carga ambiental o de salud pública injusta o inequitativa existente en las poblaciones de JA en la DGA.**

**Todo el impacto se revisará con la MEPA y los diversos programas de permisos y se mitigará según corresponda con las regulaciones aplicables. No se anticipan impactos ambientales y de salud pública a largo plazo en las poblaciones de EJ como resultado del Proyecto.**

7. Identifique los beneficios del proyecto, incluidos los “Beneficios ambientales” según se definen en 301 CMR 11.02, que podrían mejorar las condiciones ambientales o la salud pública de la población de la EJ

- Brinda nuevas oportunidades para el crecimiento comercial dentro de un área zonificada para desarrollo comercial/industrial.
- Contribuye a la economía de la región.
- Proporciona nuevas construcciones significativas y oportunidades de trabajo a largo plazo.
- Mejora la seguridad operativa y la eficiencia del Aeropuerto.
- El Aeropuerto está reservando espacio a ambos lados de la terminal para planificar la carga de aviones eléctricos, tanto para aviación general como comercial.
- Recarga de vehículos eléctricos y placas solares en techos de cobertura para vehículos y hangares.

- **Directrices modificadas para la construcción para incluir iniciativas para el desarrollo verde.**
- **Esfuerzos continuos de remediación de PFAS relacionadas con las operaciones históricas del aeropuerto.**

8. Describa cómo la comunidad puede solicitar una reunión para comentar el proyecto y cómo puede solicitar servicios de interpretación oral en la reunión. Especifique cómo solicitar otras adaptaciones, incluidas reuniones después del horario comercial y en lugares cercanos al transporte público.

**El Proponente está dispuesto a reunirse con los miembros de la comunidad en los lugares y a las horas que sean convenientes para el público. El equipo de consultores del Aeropuerto incluye especialistas en participación comunitaria que continuarán brindando servicios de extensión a las comunidades de EJ y comunidades vecinas utilizando los siguientes métodos: envíos postales, un sitio web dedicado para actualizaciones <https://flyhya.com/evaluacion-ambiental/> y documentos relacionados con los Proyectos, varias reuniones comunitarias en persona (además de las reuniones reglamentarias) y eventos temporales de información para la comunidad (p. ej., en la biblioteca).**

**Una reunión comunitaria está programada para el 27 de octubre de 2022 a las 6 p. m. en el Aeropuerto Cape Cod Gateway.**

**Para solicitar reuniones adicionales y cualquier adaptación necesaria (incluidos los servicios de interpretación de idiomas oral), comuníquese con la dirección de correo electrónico del proyecto: [enviroHYA@epsilonassociates.com](mailto:enviroHYA@epsilonassociates.com)**